deltalab

Your needs, our innovations

TELEPHONE:
+ 34 93 699 50 00

FAX:
+ 34 93 699 45 12

E-MAIL:
General: info@deltalab.es
Marketing: marketing@deltalab.es

MAIL:
Plaza de la Verneda, 1 (Pol. Ind. La Llana)
P.O. BOX 195
08191 RUBÍ (BARCELONA)
SPAIN

WEB:
www.deltalab.es

Dear customers, distributors, suppliers and friends,

We present the new edition of the DELTALAB General Catalogue, the result of two years of an intense work, which contains a wide range of products consisting of thoroughly organized items by specialty.

The catalogue that you have in your hands is the result in the shape of products, of DELTALAB's vocation of service and adaptation to the needs that are generated constantly in our industry. In response to market demands, we have incorporated new interesting items, always meeting the highest quality standards.

And in our desire for overall continuous development, I would also remark another important aspect. We redesigned the catalog image making it more minimalist and conceptual. We have also added new images that give a great aesthetic value. Also we grouped and rearranged some of the chapters in order to improve usability and content balance.

DELTALAB is a leading company in Spain in the manufacturing of single use labware and it is established as a reference company in the sector at an international level. It is certified by business volume data: over 60% of the turnover came from the sales in export markets.

Our constant ambition for self-improvement, our efforts and our investment policy in R&D allow us to improve year by year our production processes, and work intensively on product development. This is the DELTALAB commitment, working on innovation as value added of the company in an increasingly competitive market. And so, it is reflected in our slogan: "your needs, our innovations".

José Sáez Mateos
Managing Director

Iso Quality Standard

UNE-EN ISO 9001
Quality management systems.
Requirements.

UNE-EN ISO 13485
Medical devices. Quality management systems.
Requirements for regulatory purposes.

CE mark in medical devices (MDD) and medical devices for in vitro diagnostics (IVD)

The CE Mark concerns those products that, affecting human beings, may involve a risk to their health. For that reason they must comply with the following requirements:

- Do not compromise health or clinical status.
- Do not compromise user's health or safety.
- Do not compromise the health or safety of third persons.
- Minimize the risk of errors of use thanks to its ergonomic features and the environment in which it is intended to be used.
- It takes into account the technical knowledge, expertise, experience, training, and medical and physical conditions of the intended users.

The CE Mark implies installations, and work organisation, and systems are submitted to rigorous both internal and external quality controls. **It guarantees the highest level of safety when using those products intended for the sample collection and handling of human samples, both for the patient and for the user.**

CE Mark guarantees that those products will be freely commercialised within the European Union. Since December the 7th 2003, the only sanitary products (MDD and IVD) that can be commercialised are those ones with CE Mark.

Medical devices clasification

1. MEDICAL DEVICES (MDD)

According to Directive 93/42/EEC (modified by Directive 2007/47/EC), a MDD Medical Device is *"any instrument, device, equipment, material or any other article, including software, developed to be used with human beings, alone or in association with others, with the aim of: diagnosis, prevention, tracing, treatment or relief of a disease; diagnosis, tracing, treatment, relief or compensation in case of an injury or disability; investigation, substitution or modification of anatomy or physiological processes; fertility control; and not designed to perform the main action expected to be obtained by immunizing, pharmaceutical or metabolical means inside or over the human body".*

This Directive establishes 4 categories of medical devices; DELTALAB manufactures and markets temporary use product, so: **Class I** (**sterile** and **non sterile**) and **Class IIa**:

- **Class I (Non sterile): Low risk, invasive medical devices**

It includes: non sterile tongue depressors, speculums... Inspection gloves are considered both as MDD Class I and PPE (Personal Protective Equipment). All of them are self certification products.

- **Class I (sterile): Low risk, sterile, invasive medical devices**

Among others: sterile tongue depressors, sterile Ayre spatulas, sterile cytology brushes... They are certified by a Notified Body.

- **Class IIa (sterile): Moderated risk medical devices**

Swabs with and without medium are included in this Class. They are certified by a Notified Body.

CE Mark allows swabs to be used in surgical operations as an invasive product.

2. MEDICAL DEVICES FOR IN VITRO DIAGNOSTIC (IVD)

According to Directive 98/79/EC, a medical device for in vitro diagnostic is *"any medical device consisting on a reagent, reactive product, calibrator, monitoring equipment, instrumentation and equipment cases, sample containers, instrument, apparatus or system designed by the manufacturer to be used in vitro to examine human samples, including blood and tissues donations; with the aim of collecting information: about a physiologic or pathologic status, or a congenital anomaly; or to determine the security and compatibility with potential receptors; or in order to supervise therapeutical measures".*

They are considered low risk devices as they are not in touch with human beings and are self certification products.

As an example, sample containers, collection tubes, capillary tubes, etc. are included.

PPE PRODUCTS (Personal Protective Equipment)

According to Directive 89/686/EEC, a PPE product is *"any device or system a human being is wearing or using, which protects him from one or various risks that may endanger his health and/or security".* Security glasses and protection gloves are included. Inspection gloves are considered both as MDD and PPE as they protect the user while being a low risk, invasive medical device.

Sales conditions

- Goods are shipped at the purchaser's risk and on the purchaser's account.
- Goods are considered delivered, and at the responsibility of the purchaser, from their shipment from our warehouses. Any problem of transport or other is therefore the entire responsibility of the purchaser from that moment.
- **MINIMUM ORDERING QUANTITY (per total order)** according to our price list.
- **MINIMUM ORDER QUANTITY (per product):** In those products indicated, it is possible to acquire minor quantities from the standard selling unit. In those cases, a surcharge is applied in order to cover the manipulation costs. Please see specific conditions in the Sales Conditions attached to the Price List or contact our Sales Department. Orders over the standard selling unit must be multiple of this standard selling unit.
- Orders must be in complete case quantities unless indicated otherwise.
- Goods delivered are the property of DELTALAB S.L. until paid in full.
- **ORDERS** should be confirmed in writing, stating our code number, description, total quantity and referring to any quotation number that may apply. In case of doubt the code number will have preference over its description.
- For any **CLAIM** please quote our delivery note reference, batch number, product code, total quantity and any other relevant information. Any claim should be made within 60 days of receipt of goods.
- **RETURN OF GOODS**: We only accept the return of goods due to a problem caused by DELTALAB S.L. *A prior authorisation* must be obtained from our commercial department, in which *we will indicate which freight forwarder should be used.*
- Weights and measures in this catalogue are in Kgs and cubic meters.

For reasons which are beyond our control we reserve the right to modify the product specifications.

- Please contact us for any **SPECIAL PRODUCT**. In addition to the products listed we can offer a wide range of colour caps, different concentrations of anticoagulants, different configurations of our stainless steel racks and private labelled products.
- **SALES CONDITIONS:** You can see our complete sales conditions at DELTALABs Price list.
- Please contact our commercial department for more information.

DELTALAB S.L.

Nomenclator

Stackable

Graduated

Alphanumerical Identification

Floats

DNAse and RNAse free

Autoclavable (see more information about autoclaving in page 11)

Suitable for PCR

Suitable for QPCR (Real Time PCR)

Innovative product

New

Directive 98/79/EC (in Vitro Diagnostic medical device)

Directive 93/42/EEC (low and moderate risk medical device)

Directive 93/42/EEC (Moderate risk, sterile medical device)

Directive 89/686/EEC (Personal protective equipment)

The technical data (dimensions, capacities and resistances) specified in this catalogue are approximated.
The resistances (to chemical products, temperature, centrifugation…) may suffer variations depending on external conditions. We recommend to test the product under the forecasted conditions of use. Please do not hesitate to ask for samples if necessary.

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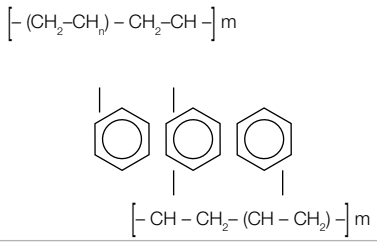
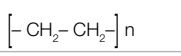
	PELD		PEHD		PP		PS		TPX		ABS		PMMA		PC		PVC		PTFE	
°C	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50
1.4 - dioxane	●	■	●	●	■	■	✖	✖	■	■			✖	✖	■	■	✖	✖	●	●
Acetaldehyde	●	✖	●	■	●	✖	✖	✖	●	✖	✖	✖	✖	✖	■	✖	■	✖	●	●
Acetic acid	●	●	●	●	●	●	■	■	●	●	✖	✖	✖	✖	●	■	●	■	●	●
Acetone	■	✖	●	●	●	●	✖	✖	●	●	■	■	✖	✖	✖	✖	✖	✖	●	●
Acrylonitrile	●	●	●	●	■	✖	✖	✖	✖	✖			✖	✖	✖	✖	✖	✖	●	●
Adipic acid	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	■	●	●
Aluminium chloride	●	●	●	●	●	●	●	●	●	●			●	●	✖	✖	●	■	●	●
Aluminium hydroxide	●	●	●	●	●	●	■	■	●	■			■	■	■	✖	●	●	●	●
Allyl alcohol	●	●	●	●	●	●	●	■	●	■			✖	✖	●	■	■	✖	●	●
Amino acids	●	●	●	●	●	●	●	●	●	●					●	●	●	●	●	●
Ammoniac	●	●	●	●	●	●	■	✖	●	●			●	●	✖	✖	■	■	●	●
Ammonic hydroxide (30 %)	●	●	●	●	●	●	■	✖	●	●	●	■	●	●	✖	✖	●	■	●	●
Ammonium chloride	●	●	●	●	●	●	●	●	●	●	●	●	■	■	■	■	●	■	●	●
Amyl acetate	■	✖	●	■	■	✖	✖	✖	●	■			●	●	✖	✖	✖	✖	●	●
Amyl alcohol	●	●	●	●	●	●	■	■	●	●					●	●	■	■	●	●
Amyl chloride	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖			✖	✖	✖	✖	✖	✖	●	●
Aniline	●	■	●	●	●	●	✖	✖	●	■	✖	✖	✖	✖	■	✖	✖	✖	●	●
Aqua regia	✖	✖	✖	✖	■	✖	■	✖	■	■	✖	✖	✖	✖	✖	✖	■	■	●	●
Benzaldehyde	●	●	●	●	●	●	✖	✖	●	●	✖	✖	✖	✖	■	✖	✖	✖	●	●
Benzene	■	✖	●	●	●	■	✖	✖	●	■	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Benzine	■	✖	●	●	■	■	✖	✖	●	■			●	●	■	✖	●	●	●	●
Benzoid acid	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖			✖	✖	■	■	■	■	●	●
Boric acid (10 %)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Bromine	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖			✖	✖	✖	✖	✖	✖	●	●
Bromoform	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖			✖	✖	✖	✖	✖	✖	●	●
Butyl acetate	■	■	●	●	■	■	✖	✖	●	■	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Butyl alcohol	●	●	●	●	●	●	■	✖	●	■	✖	✖	■	✖	■	■	■	■	●	●
Calcium chloride	●	●	●	●	●	●	●	●	●	●			●	●	●	●	■	✖	●	●
Calcium hydroxide	●	●	●	●	●	●	●	■	●	●			●	●	✖	✖	●	●	●	●
Calcium hypoclorit	●	●	●	●	●	●	●	●	●	■			■	■	■	✖	■	✖	●	●
Carbon sulphate	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖			✖	✖	✖	✖	✖	✖	●	●
Carbon tetrachloride	✖	✖	■	✖	✖	✖	✖	✖	✖	✖			■	✖	✖	✖	✖	✖	●	●
Citric acid	●	●	●	●	●	●	●	■	●	●	●	●			●	■	■	■	●	●
Cupric sulphate	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	■	●	●
Chlorine (10 %)	■	✖	■	✖	■	✖	✖	✖	■	✖			■	✖	■	■	■	✖	●	●
Chlorine water	✖	✖	✖	✖	✖	✖	✖	✖	■	✖	●	●	✖	✖	✖	✖	✖	✖	●	●
Chloroform	✖	✖	●	■	✖	✖	✖	✖	■	✖	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Chlorydic acid (35 %)	●	●	●	●	●	●	■	■	●	●			■	✖	✖	✖	■	✖	●	●
Chromic acid (10 %)	●	●	●	●	●	●	■	■	●	●			■	✖	●	■	●	■	●	●
Chromic acid (50 %)	●	■	●	■	■	■	✖	✖	■	■			✖	✖	■	✖	●	✖	●	●
Chromic sulphate blend	●	✖	●	✖	✖	✖	■	■	■	✖			✖	✖	✖	✖	●	■	●	●
Decahydronaphtalene	■	■	■	■	✖	✖	✖	✖	■	✖			✖	✖	✖	✖	●	■	●	●
Dichlorobenzene	■	✖	■	✖	■	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Diethylene glycol	●	●	●	●	●	●	■	✖	●	●			✖	✖	■	■	✖	✖	●	●
Dimethyl formamide	●	●	●	●	●	●	✖	✖	●	●			✖	✖	✖	✖	■	✖	●	●
Dimethyl sulphoxide	●	●	●	●	●	●	✖	✖	●	●			✖	✖	✖	✖	✖	✖	●	●
Ether	✖	✖	■	✖	■	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Ethyl acetate	●	●	●	●	●	●	✖	✖	●	■	✖	✖			✖	✖	✖	✖	●	●
Ethyl alcohol (100%)	●	●	●	●	●	●	✖	✖	●	■	■	■	✖	✖	●	■	●	■	●	●
Ethylene chloride	✖	✖	✖	✖	■	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Ethylene oxide	■	■	■	■	■	✖	✖	✖	■	✖			✖	✖	■	✖	■	✖	●	●
Fluorine	✖	✖	✖	✖	✖	✖	✖	✖	■	✖			✖	✖	■	■	●	●	●	●
Formaldehyde (40 %)	●	●	●	●	●	●	✖	✖	●	●	■	✖	✖	✖	●	■	■	✖	●	●
Formic acid (98-100 %)	●	●	●	●	●	●	●	■	●	●	■	■	✖	✖	●	■	✖	✖	●	●
Fuel oil	■	✖	●	■	●	●	✖	✖	■	■			■	✖	●	■	✖	✖	●	●
Glacial acetic acid	●	■	●	●	●	■	✖	✖	●	■	✖	✖			✖	✖	●	■	●	●
Glycerine	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Glycol	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●

	PELD		PEHD		PP		PS		TPX		ABS		PMMA		PC		PVC		PTFE	
°C	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50	20	50
Hexane	✖	✖	●	■	●	■	■	✖	■	✖	✖	✖	●	●	✖	✖	■	✖	●	●
Hydrofluoric acid (40 %)	●	●	●	●	●	●	●	●	●	●			✖	✖	✖	✖	■	✖	●	●
Hydrofluoric acid (70 %)	●	✖	●	■	●	■	✖	✖	●	■			✖	✖	✖	✖	✖	✖	●	●
Hydrogen peroxide (35%)	●	●	●	●	●	●	●	●	●	●	✖	✖	✖	✖	●	●	●	■	●	●
Iodine	✖	✖	✖	✖	●	●	■	✖	●	■			✖	✖	■	✖	✖	✖	●	●
Isobutyl alcohol	●	●	●	●	●	●	■	■	●	●			■	✖	●	●	●	■	●	●
Isopropyl alcohol	●	●	●	●	●	●	■	■	●	●			■	✖	●	●	●	■	●	●
Isopropyl benzene	■	✖	●	■	■	✖	✖	✖	✖	✖			✖	✖	✖	✖	✖	✖	●	●
Lactic acid	●	●	●	●	●	●	●	●	●	●	●	●	■	✖	●	●	■	■	●	●
Mercurous chloride	●	●	●	●	●	●	●	■	●	●			●	●	●	●	✖	✖	●	●
Mercury	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●
Methyl acetate	■	✖	■	■	●	■	✖	✖	●	●	✖	✖			✖	✖	✖	✖	●	●
Methyl alcohol	●	■	●	●	●	●	■	✖	●	●	■	✖	✖	✖	●	■	●	■	●	●
Methyl propyl ketone	●	■	●	●	●	■	✖	✖	■	■			✖	✖	✖	✖	✖	✖	●	●
Methylene chloride	✖	✖	■	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Mineral oil	●	■	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●
Monochloroacetic acid	●	●	●	●	●	●	✖	✖	●	●			■	✖	■	✖	●	●	●	●
Nitric acid (10 %)	●	●	●	●	●	●	✖	✖	●	●	●	●	●	■	●	■	●	■	●	●
Nitric acid (50 %)	■	■	■	✖	■	✖	✖	✖	■	✖			■	■	●	■	■	✖	●	●
Nitric acid (70 %)	✖	✖	✖	✖	✖	✖	✖	✖	■	✖	✖	✖	■	✖	✖	✖	✖	✖	●	●
Nitrobenxene	✖	✖	■	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Oxalic acid	●	●	●	●	●	●	●	●	●	●	●	■	●	●	●	●	●	●	●	●
Ozone	●	●	●	●	●	●	■	■	●	●			●	●	●	●	●	■	●	●
Perchloric acid	●	✖	●	✖	●	✖	✖	✖	■	✖	✖	✖	✖	✖	✖	✖	■	✖	●	●
Perchloroethylene	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖			■	✖	✖	✖	✖	✖	●	●
Phenol (100 %)	●	■	●	●	●	●	✖	✖	■	■			✖	✖	✖	✖	✖	✖	●	●
Phosphoric acid (85 %)	●	●	●	●	●	●	●	■	●	●	●	●	✖	✖	●	●	●	■	●	●
Phtalat dibutylic	■	✖	■	✖	●	■	✖	✖	●	■			✖	✖	✖	✖	✖	✖	●	●
Potassium chloride	●	●	●	●	●	●	■	■	●	●			●	●	●	●	●	■	●	●
Potassium hydroxide	●	●	●	●	●	●	■	■	●	●	●	●	●	●	✖	✖	■	■	●	●
Potassium permanganate	●	●	●	●	●	●	●	●	●	●	■	■	●	●	●	●	●	●	●	●
Propylene glycol	●	●	●	●	●	●	●	●	●	●	●	●			●	■	✖	✖	●	●
Propylene oxide	●	●	●	●	●	●	✖	✖	●	●					✖	✖	✖	✖	●	●
Pyridine	●	■	●	■	■	■	✖	✖	●	■	✖	✖	✖	✖	✖	✖	■	✖	●	●
Salicylic acid	●	●	●	●	●	●	●	●	●	●							■	✖	●	●
Salicylic aldehyde	●	●	●	●	●	●	✖	✖	●	●					■	■	✖	✖	●	●
Silver acetate	●	●	●	●	●	●	■	■	●	●			■	■	●	●	■	■	●	●
Silver nitrate	●	●	●	●	●	●	■	■	●	●			●	●	●	●	■	■	●	●
Sodium acetate	●	●	●	●	●	●	●	●	●	●			✖	✖	●	●	■	■	●	●
Sodium dichromate	●	●	●	●	●	●	●	●	●	●			●	●			●	●	●	●
Sodium hydroxide	●	●	●	●	●	●	●	●	●	●	●	●			✖	✖	●	●	●	●
Sulfuric acid (60 %)	●	●	●	●	●	●	✖	✖	●	●			✖	✖	■	■	■	✖	●	●
Sulfuric acid (98 %)	■	✖	■	✖	✖	✖	✖	✖	●	●	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Tartaric acid	●	●	●	●	●	●	●	●	●	●			■	■	●	●	●	●	●	●
Tetrahydrofuran	✖	✖	■	✖	✖	✖	✖	✖	■	✖	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Toluene	■	✖	■	■	■	✖	✖	✖	■	✖	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Trichloroethane	✖	✖	■	✖	✖	✖	✖	✖	✖	✖			✖	✖	✖	✖	✖	✖	●	●
Trichloroethylene	✖	✖	■	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Triethylene glycol	●	●	●	●	●	●	●	■	●	●			■	■	●	■	■	✖	●	●
Tripropylene glycol	●	●	●	●	●	●	●	●	●	●			■	■	●	■	■	✖	●	●
Turpentine	■	✖	■	✖	✖	✖	✖	✖	■	■	✖	✖	●	●	✖	✖	●	●	●	●
Urea	●	●	●	●	●	●	●	●	●	●			●	●	✖	✖	■	✖	●	●
Vinylidene chloride	✖	✖	■	✖	✖	✖	✖	✖	✖	✖			✖	✖	✖	✖	✖	✖	●	●
Xylol	■	✖	■	✖	✖	✖	✖	✖	■	✖	✖	✖	✖	✖	✖	✖	✖	✖	●	●
Zinc chloride (10 %)	●	●	●	●	●	●	●	●	●	●			✖	✖	●	●	●	■	●	●
Zinc sulphate (10 %)	●	●	●	●	●	●	●	●	●	●	✖	✖	■	■	●	●	●	■	●	●

● = Excellent / very good chemical resistance
■ = Good / limited chemical resistance
✖ = Poor chemical resistance

Chemical resistances

	POLYSTYRENE	HIGH DENSITY POLYETHYLENE	LOW DENSITY POLYETHYLENE	POLYPROPYLENE
GENERAL PROPERTIES	**PS**	**PEHD**	**LDPE**	**PP STANDAR**
Structure	Amorphous structure with stable dimensions 	The catalytic controlled polymerisation of ethylene minimises the production of compact, lateral structures resulting in a pliable but rigid material.	Ethylene is polymerised under super pressure, which produces a higher number of less compact lateral structures resulting in a material which is more flexible than HDPE. 	Polypropylene properties are similar to polyethylene. A methyl group is bonded to each carbon pair, which greatly improves the thermal resistance. Polyethylene becomes brittle when in contact with oxidants for long periods of time.
Transparency	Optically clear	Opaque	Opaque	Translucent
Mechanical resistance	Rigid / Brittle	Rigid	Flexible	Resists Deformation
Density	1,05 gr/cm^2	0,955 gr/cm^2	0,924 gr/cm^2	0,91 gr/cm^2
Max. temperature	70º C	80º C	75º C	121º C
Min. temperature	-10º C	-50º C	-50º C	0º C*
Autoclavable	NO	NO	NO	YES
Gas sterilization	DOSES LIMITED	YES	YES	YES
Gamma irradiation Sterilization	YES	YES	YES	DOSES LIMITED
Beta irradiation Sterilization	YES	YES	YES	YES
Water absorption	< 0,05 %	< 0,01 %	< 0,01 %	< 0,02 %
Properties	-Bright finish -Clear	- Light. - Slight electrostatic Charge	- Light weighted. - Slight electrostatic change - Impact resistant	-Virtually inert

*There are special blends of PP like those from our cryovials, which are able to withstand up to –196 ºC.

	POLYSTYRENE	HIGH DENSITY POLYETHYLENE	LOW DENSITY POLYETHYLENE	POLYPROPYLENE
GENERAL CHEMICAL RESISTANCE	**PS**	**HDPE**	**LDPE**	**PP STANDARD**
Oils	GOOD	GOOD	GOOD	GOOD
Acids	LIMITED*	GOOD*	GOOD*	GOOD*
Alcohol	GOOD	GOOD	GOOD	GOOD
Bases	GOOD	GOOD	GOOD	GOOD
Ketones	POOR	LIMITED	LIMITED	LIMITED
Esters	POOR	LIMITED	LIMITED	LIMITED
Fats	GOOD	GOOD	GOOD	GOOD
Hydrocarbons -aromatics	POOR	GOOD	LIMITED	GOOD
Hydrocarbons Chloride	See chemical resistance table**	LIMITED	LIMITED	See chemical resistant table**
Hydrocarbons Halogenated	POOR	LIMITED	LIMITED	LIMITED
Metals (Cu, Mn, Co)	See chemical resistance table**	See chemical resistant table**	See chemical resistant table**	LIMITED
Oxidants	See chemical resistance table**	LIMITED/POOR	LIMITED/POOR	LIMITED/POOR

* Poor resistance to strong oxidant acids
** Chemical resistances of plastics are detailed in a specific table

Sterilisation methods

METHOD	PROCEDURE	RECOMMENDED FOR	PRECAUTIONS	LIMITATIONS
Dry heat	Direct action of dry heat 190 ºC for 80' or 160 ºC (130-160').	Glassware, metals and liquids.	High temperatures may damage fragile metals.	The own material's limitations. High heat soaking may unacceptabbly affect material properties.
Autoclave,Super Heated Steam under pressure	Action of 3 elements: temperature, water steam and pressure 121 ºC (15'), 126 ºC (10')	Glassware, fabrics, liquids etc. All materials resistant to heat above 121 ºC and moisture.	Not recommended for most ordinary plastics. When autoclaving capped containers, total closure shall be avoided	Generally used for the sterilisation of small articles.
Ethylene Oxide ("EO Gas")	Used alone, associated with freon or carbon dioxyde. 55 to 60 ºC (2-3h), 27 ºC to 33 ºC (5h30)	Generally all materials, some exceptions.	Requires a subsequent ventilation to ensure sterilised products are free of residual gases that may be toxic.	Ethylene oxide is toxic and explosive.
Gamma irradiation (Radioactive cobalt source)	By radiations emitted by a radioactive source	Widely used in industries to sterilise single use material. Sterilisation doses are calculated from bioburden counts.	Limitations in some applications, as some material properties may be unacceptably altered by this method.	Effects on material are cumulative, therefore gamma sterilised products are not resterilisable, by most conventional methods, after first use.
Beta irradiation (non radioactive particle accelerator)	High energy electron beam	Widely used in industries to sterilise single use material. Sterilisation doses are calculated from bioburden counts.	Limitation in some applications, as some material properties may be unacceptably altered by this method.	Affects on material are cumulative, therefore beta sterilised products are not resterilisable, by most conventional methods, after first use.
Chemical (Formol-Aldehydes)	Chemical products are steam and heat	Special applications, minimal industrial use.	Toxic	Requires specialised sterilisation equipment and procedures.

In an **ASEPTIC PRODUCTION**, manufacturing processes, packaging methods and environment are designed to prevent bacterial contamination (bioburden). Our ***EUROTUBO®*** containers are injected at a temperature of 250 ºC and are automatically connected to the assembling and packaging processes, without manual intervention, so as to guarantee an aseptic production.

Glove properties chart

	LATEX	NITRILE	VINYL
Mechanical resistance			
- Perforation	■	■	■
- Tearing	■	■	■
Adequate for foodstuff handling	✖	■	■
Comfort	■	■	■

Glove chemical resistance chart

Diluted mineral acids			
Hydrochloric acid	■	■	■
Chromic acid	✖	■	■
Nitric acid	■	■	■
Perchloric acid	■	■	■
Phosphoric acid and Sulphuric acid	■	■	■
Concentrated acids			
Chlorhidric acid	■	■	■
Chromic acid	✖	■	■
Nitric acid	■	■	■
Sulphuric acid	✖	✖	■
Hydrocarbon and oil by products			
Aniline	■	■	✖
White spirit	✖	■	■
Styrene	✖	■	■
Gasoline, Hexane, Paraffine, Kerosene	✖	■	■

Maximum resistance of nitrile gloves 125 ºC.
■ : Excelent; ■ : Good;
■ : Limited; ✖ : Not recommended
These indications are solely for information. It is strongly recommended that the user carries out preliminary testings.

CENTRIFUGATION:

Conversion G - R.P.M.

The relative centrifugal force (RCF) can be determined using the formula:

FCR= 1,118 x 10-6 x r x n²

r= radius of the rotor (mm); distance between the axis of the rotor and the farest wall of the tube.
n= rotating speed (revolutions per minute).
The result is expressed in terms of acceleration (g); 1 g is equal to 9,807 m/s².
It is recommended that the centrifuge caps fit in size and shape to the tubes to be centrifuged.

Conversion chart xg - R.P.M.

r / xg	1,000 xg	1,500 xg	2,000 xg	2,500 xg	3,000 xg	3,500 xg	4,000 xg	4,500 xg	5,000 xg	10,000 xg	15,000 xg
50 mm	rpm 4,227	5,177	5,978	6,683	7,321	7,908	8,454	8,967	9,452	13,367	16,371
75 mm	3,451	rpm 4,227	4,881	5,457	5,978	6,457	6,903	7,321	7,717	10,914	13,367
100 mm	2,989	3,661	rpm 4,227	4,726	5,177	5,592	5,978	6,340	6,683	9,452	11,576
125 mm	2,673	3,274	3,781	rpm 4,227	4,630	5,001	5,347	5,671	5,978	8,454	10,354
150 mm	2,440	2,989	3,451	3,859	rpm 4,227	4,566	4,881	5,177	5,457	7,717	9,452
175 mm	2,259	2,767	3,195	3,572	3,913	rpm 4,227	4,519	4,793	5,052	7,145	8,751
200 mm	2,113	2,588	2,989	3,342	3,661	3,954	rpm 4,227	4,483	4,725	6,683	8,185
225 mm	1,993	2,440	2,818	3,151	3,451	3,728	3,985	rpm 4,227	4,456	6,301	7,717
250 mm	1,890	2,315	2,673	2,989	3,274	3,537	3,781	4,010	rpm 4,227	5,978	7,321

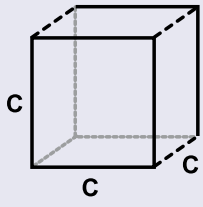
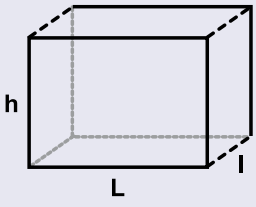
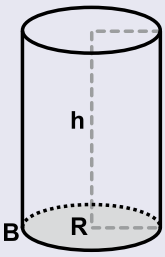
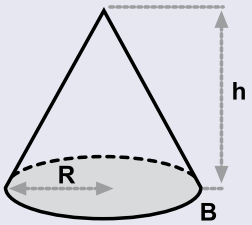
METRIC EQUIVALENCES

ANGLO-SAXON MEASURES	METRIC SYSTEM
Length: 1 inch (in) = 2.54 cm 12 in = 1 foot (ft) = 30.48 cm 3 ft = 1 yard (yd) = 91.44 m 1,760 yd = 1 mile = 5,280 ft = ±1.6093 km	1 centimeter (cm) = 0.01 metro (m) 1 millimeter (mm) = 0.1 cm 1 micron (µm) = 0.001 mm 1 nanometer (nm) = 0.001 µm
Volume: 1 cubic inch (in^3) = 16.387 cm^3 1,728 in^3 = 1 cubic foot (ft^3) = 0.0283 m^3 27 ft^3 = 1 cubic yard (yd^3) = 0.7646 m^3	1,000 mm^3 = 1 cubic centimeter (cm^3) 1,000 cm^3 = 1 cubic decimeter (dm^3) 1,000 dm^3 = 1 cubic meter (m^3)
Capacity: 1 ounce EUA (fl.oz) = 29.57 ml 1 gallon EUA = 3.7854 l 1 gill = 0.142 l 4 gills = 1 pint = 0.5683 l 2 pints (pt) = 1 cuarto (qt) = 1.1365 l 4 qt = 1 brit gallon = 4.5461 l	1 microliter (µl)= 0.001 ml 1 milliliter (ml) = 0.001 l 1 centiliter (cl) = 0.01 l 1 deciliter (dl) = 0.1 l 1 cubic decimeter (dm^3) = 1 l 1 hectoliter (hl) = 100 l
Weight : 1 ounce (oz) = 28,349 g (1 g = 0.035 oz) 16 oz = 1 pound (lb) = 0.4536 kg 112 lb = 1 hundredweight (cwt) = 50.80 kg	1 kilogramme (kg) = 1,000 g 1 milligramme(mg) = 0.001 g 1 microgramme (µg) = 0.001 mg

PRESSURE: CONVERSION

IS EQUAL TO:	
1 at (technical atmosphere)	0.980665 bar
1 Atm (physical atmosphere)	1.01325 bar
1 Atm	1.033 at
1 bar	105 Pa (Pascal)
1 Torr	1.3332 mbar (milibar)

HOW TO FIGURE OUT VOLUMES

CUBE	RECTANGULAR PRISM	CYLINDER	CONE
			
$V = C^3$	$V = (l \times h) \times l$	$S = 2\pi Rh$ (lateral volume) $V = Bh = \pi R^2 h$	$V = \frac{Bh}{3} = \frac{\pi R^2 h}{3}$

CONVERSION (ºF - ºC - ºK)

ºF (Farenheit) = (ºC x 1,8) + 32	ºC (Celsius) = (ºF – 32) x 0,556	ºK (Kelvin) = ºC + 273,15

USEFUL INFORMATION: TRANSPORT

Containers: capacity:	20 feet: 28 m3 maximum 40 feet: 58 m3 maximum 40 HC feet: 68 m3 maximum
Pallets:	maximum height land transport: 2.40 m maximum height sea transport: 2.10 m width x depth european pallet: 80 x 120 cm width x depth american pallet: 100 x 120 cm


STERILE


TERILE

Swabs for microbiological sampling

Swabs are used for biological sampling.

Specially used for processing samples which, after being coloured, will be analysed by microscopy.

Also suitable for isolations in culture medium.

Another important use is its capacity to spread dishes by dissemination techniques (for example for susceptibility testing by Kirby-Bauer or by E-test).

Swabs class IIa

The swabs for the collection and transport of microbiological samples are considered invasive surgical-type product and with a use, in compliance with the essential requirements of the "Directive 93/42/EEC. Medical devices". According to the classification rules contained in this Directive, the swabs are part of Class IIa.

The ***Agencia Española del Medicamento y Productos Santarios*** (AEMPS – ON 0318) is the institution who certifies these swabs.

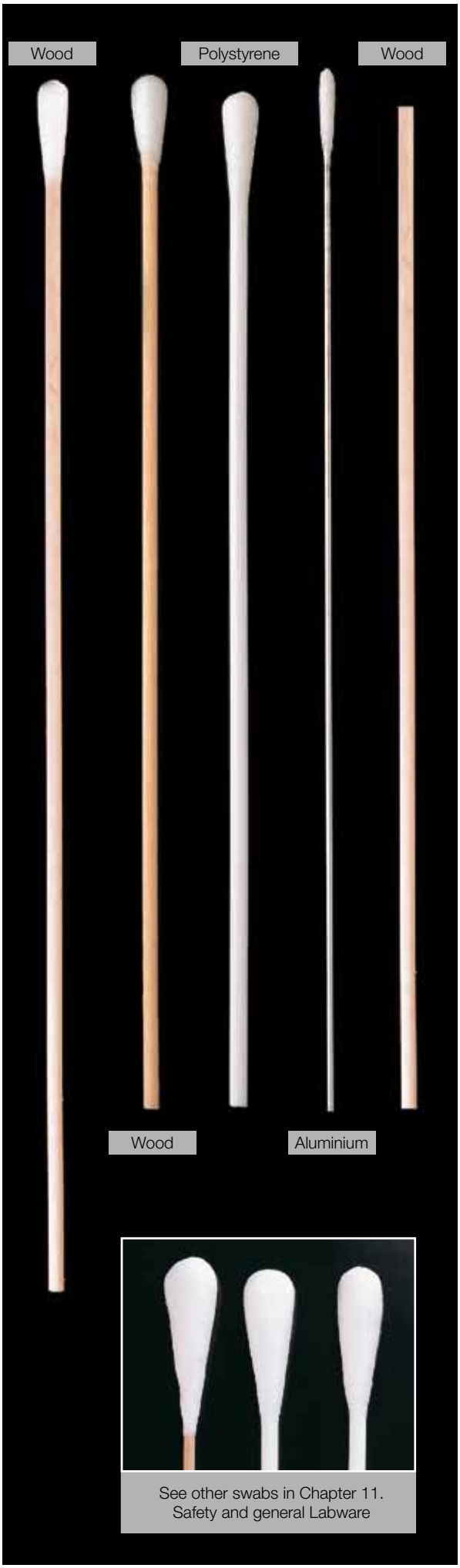
Quality standards – Requirements fulfilled by swabs

1. UNE-EN ISO 556-1 Sanitary products sterilisation. Requirements to be designed as "STERILE". Part 1: sterilised sanitary products requirements.
2. UNE-EN ISO 868-2 Packaging materials for medical devices sterilized in its final phase. Part 2: sterilization wrap. Requirements and test methods.
3. UNE-EN ISO 11737-1 Sterilization of medical devices. Microbiological methods. Part 1: determination of a population of microorganisms.
4. UNE-EN ISO 11737-2 Sterilization of medical devices. Microbiological methods. Part 2: sterility tests conducted to validate a sterilization process.
5. UNE-EN ISO 11135-1 Sterilization of medical devices. Ethylene oxide. Part 1: requirements for development, validation and control of the routine of a sterilization process of medical devices.
6. UNE-EN ISO 11137-1 Sterilization of health care products. Radiation. Part 1: requirements for the development, validation, and control of the routine of a sterilization process of PS.
7. UNE-EN ISO 11137-2 Sterilization of health care products. Radiation. Part 2: setting the sterilization dose.
8. UNE-EN ISO 15223-1 Sanitary products. Symbols to use on labels, labelling and information to be supplied. Part 1: general requirements.
9. UNE-EN ISO 14971 Sanitary products. Application of risk on management.
10. UNE-EN ISO 13485 Sanitary products. Systems of quality management. Requirements for regulatory purposes.

Presentations

1. **In bulk**: the non-sterile swabs presented in bags of 100 units.
2. **Peel-pack package**: single bag. Paper (fiber free) which can be peeled. It consists in one side of medical paper and another side of polyethylene.
3. **Flow-pack package**: single bag. Polypropylene bioriented bag.
4. **Package in polypropylene tube**: The product is identified on the label.

All sort of package have the following parameters printed on: product code, product description, lot number, expiry date, CE mark, manufacturer name and address, sterilisation method and single use mark ②.



See other swabs in Chapter 11.
Safety and general Labware

Non sterile swabs

CE (MDD)

Model **300232** is longer than the traditional swabs and is designed for those hard to reach places.
For use in gynaecology when taking endocervical cells while using the speculum.

Dimensions:
300232 shaft 200 x 2.5 mm. Tip 5 mm Ø.

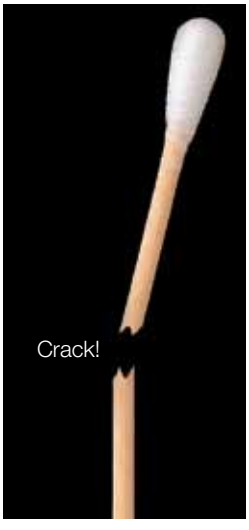
Other models dimensions:
Wood: 150 x 2.2 mm (tip Ø ± 5 mm).
Plastic: 150 x 2.5 mm (tip Ø ± 5 mm).
Aluminium: 150 x 0.9 mm (tip Ø ± 1.5 mm).

They are supplied in bags of 100 units, excepting code **300205**, supplied bulk.

code	description	case quantity	case weight	case volume
300232	extra large wood (200 mm) + cotton	80 x 100	5.85	0.030
300230	standard wood (150 mm) + cotton	100 x 100	4.40	0.032
300260	polypropylene + cotton	40 x 100	2.20	0.010
300270	snappable polystyrene + cotton	40 x 100	2.50	0.016
300268	snappable polystyrene + polyester	40 x 100	5.40	0.030
300243	aluminium + cotton	10 x 100	3.00	0.005
300205*	wooden shaft only	1 x 1,000	0.41	0.001

* Non CE product
Expiry date: 60 months

All swabs have a round, compact and shred resistant head for a proper sampling avoiding fiber loose.



Wood

Snappable polystyrene

Aluminium

Sterile swabs

CE class IIa (MDD)

Sterile swabs individually wrapped in peel-pack (sterilized by ethylene oxide) or flow pack (sterilized by radiation), depending on the model.
For use when samples do not need to be transported.
We recommend our transport swabs in tubes when sample transport is required (see next page).

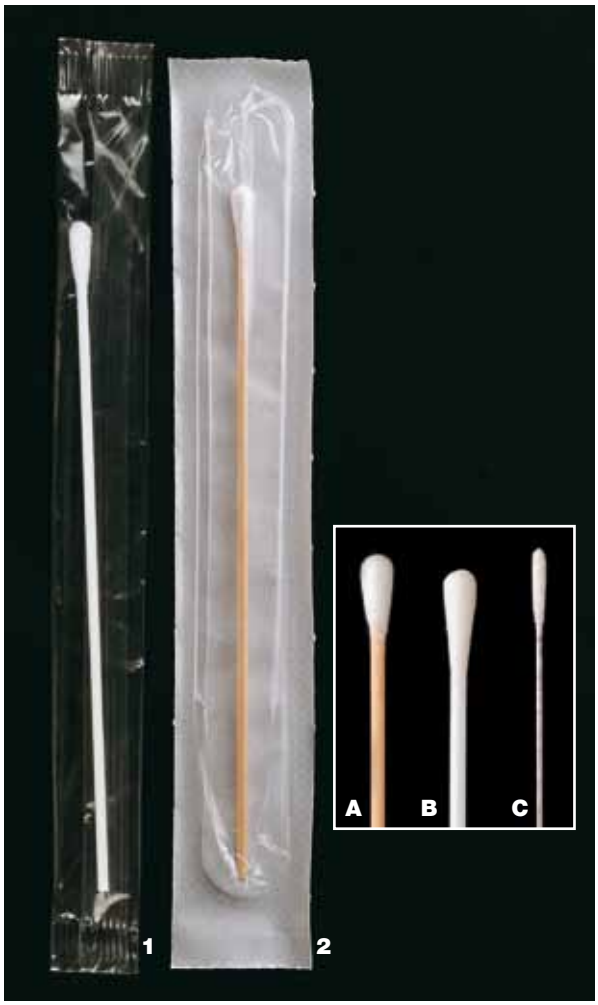
code	description	package	case quantity	case weight	case volume
300200	wood + cotton	peel-pack	2 x 1,000	2.6	0.029
310200	wood + cotton	flow-pack	2 x 1,000	2.6	0.029
300201	snappable PS + cotton	peel-pack	2 x 1,000	3.5	0.029
300202	snappable PS + viscose	peel-pack	2 x 1,000	3.5	0.029
310202	snappable PS + viscose	flow-pack	2 x 1,000	2.02	0.029
300203	aluminium + cotton	peel-pack	2 x 1,000	2.4	0.029
310253.1	aluminium + viscose	flow-pack	2 x 1,000	2.3	0.029

Cases per pallet: 54.

1. Flow-pack
2. Peel-pack

A: Wood
B: Snappable polystyrene
C: Aluminium

Expiry date: 48 month from sterilization date.



Sterile swabs (2 units)

CE class IIa (MDD)

Two Sterile swabs wrapped in peel-pack (sterilized by ethylene oxide) or flow pack (sterilized by radiation), depending on the model.
One swab is designed for cleaning the sampling area.
The other swab is designed for sample collection. For use when samples do not need to be transported.
We recommend our transport swabs in tubes when sample transport is required
1,000 peel-packs/flow-packs with 2 units each one per case.

code	description	package	case quantity	case weight	case volume	cases per pallet
300210	wood + cotton	peel-pack	1,000	2.54	0.025	54
300211.1	snappable PS + cotton	peel-pack	1,000	2.72	0.025	54
310211.1	snappable PS + cotton	flow-pack	1,000	2.90	0.029	54

Expiry date: 48 month from sterilization date.

Sterile swab in round tube

CE class IIa (MDD)

Sterile dry swabs supplied in shockproof round bottom polypropylene tube, with a label sealing the cap.
Dimensions of tube: Ø 13 x 165 mm.
Sterilised by ethylene oxide.

code	description	case quantity	case weight	case volume	cases per pallet
300250	wood + cotton	4 x 500	15.00	0.065	24
300259	wood + viscose	4 x 500	14.00	0.070	24
300261	snappable polystyrene + cotton	4 x 500	14.20	0.070	24
300252	snappable polystyrene + viscose	4 x 500	14.20	0.070	24
300251	aluminium + cotton	4 x 500	14.00	0.070	24
300253	aluminium + viscose	4 x 500	13.90	0.070	24
300263	snappable polystyrene + polyester	4 x 500	14.20	0.070	24
300250.1	wood + pure cotton	4 x 500	14.00	0.070	24
NEW **300254**	twisted aluminium + viscose	4 x 500	13.40	0.066	24
NEW INNOVATIVE **300265**	polystyrene + flocked polyester	4 x 500	14.20	0.065	24

Expiry date: 48 month from sterilization date.

NEW **Twisted aluminium**: This is a new material excepcionally flexible to use it in sensitive zones as nasopharyngeal, ocular or for pediatric uses.

Human DNA free certified swabs, steriles

Human DNA free Certified. **Sterile**.
The swab is supplied in a polypropylene tube, which protects the sample up to the laboratory prior to its analysis. The stick of the swab is made of polystyrene while the head is produced with viscose, polyester or cotton according to the code. The tube is labeled indicating code, description, lot, expiry date and providing an identifying area to note down collection details (site, date, etc.). Moreover, the label seals the tube with the cap of the swab, acting like a tamper evident system.

code	description	selling unit	case quantity	case weight	case volume
300252DNA	polystyrene + viscose	500	4 x 500	14.20	0.066
300263DNA	polystyrene + polyester (dacron® type)	500	4 x 500	14.20	0.066
300261DNA	polystyrene + cotton	500	4 x 500	14.20	0.066

Expiry date: 48 months from sterilisation date

δswab®

INNOVATIVE NEW

Collection and transport system for microbiological samples

- This innovative systems brings together a **flocked swab** with a **liquid transport medium**
- The **sample is suspended on the medium** getting higher feasibility and reliability
- Compatible with **automatic inoculation and streaking**, as well as with the manual ones
- All products of δswab® range consist in:

Flocked swab

- Guarantees the maximum absorption and elution of the sample in the medium
- Offers a great versatility, adaptability and comfort for the user

Standard

Urethral

Nasopharyngeal

Pediatric

Liquid media

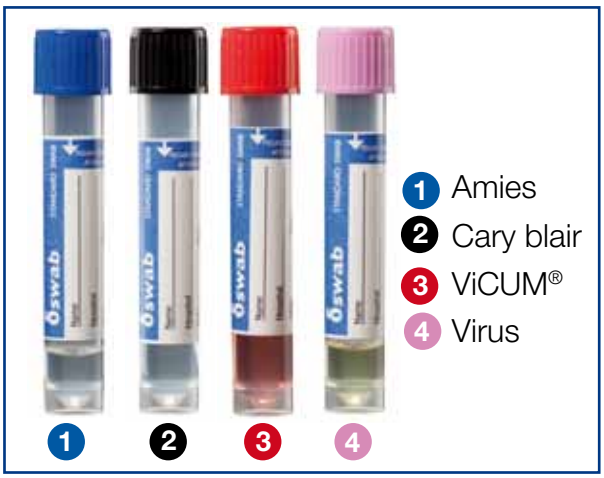
- Concept change in the collection and transport of microbiological samples
- The liquid medium makes possible the obtention of different homogeneous innoculum of one sample

Transport media

- Allows the transport of multiple microorganisms assuring its feasibility until the analysis

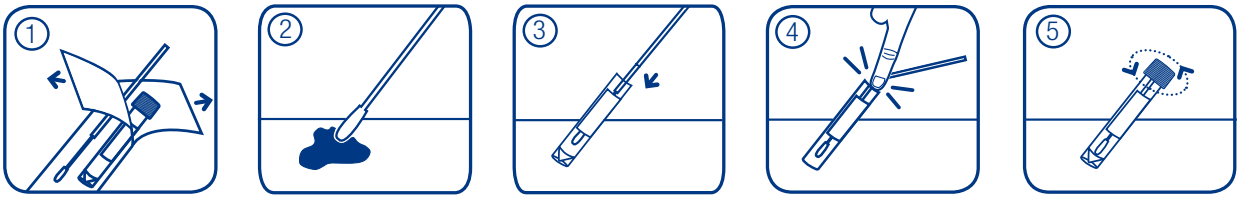
Enrichment media

- Designed for the isolation and culture of bacteria



The δswab® liquid media range has been designed following the methodology of the CLSI Standard, M40-A (Quality Control of Microbiology Transport Systems: approved standard)

Instructions



Transport swabs with media

Safety
- Paper less, plastic peel-pack is an extraordinary safe system to maintain pack integrity and sterility

Comfort
- Space saving
- Collapsible internal case
- Easy wharehouse identification
- Selling unit easy to commercialize
- New standardised pack quantity for all our swabs
- The peel-pack has a small slit at the top to allow easy opening

Information
- Full range of transport medias listed on the package
- Clear dual CE Marking IVD + MDD printed in both, peel-pack and case
- User's guide provided in both, peel-pack and case

Design
- Attractive peel-pack and friendly users guide
- Eye-catching case designed exclusively for swabs
- Drawings of a swab and a tube on both the peel-pack and the case for first sight identificacion

Traceability
- Each single peel-pack is printed with the catalogue number, bar code, lot mumber, expiry date and product description
- Both external and internal cases are also identified with catalogue number, bar code, lot number, expiry date and product description.

Environmentally friendly
- Peel pack made of one material only: easy recycling!

CE Swabs

As the two main components of a transport swab have different purposes and different ways of interaction with the patient, both have different CE treatment:

1. **Swab**: for microbiological sample collection. As a surgical invasive product of temporary use, is classified as CLASS IIa product in compliance with Guideline 93/42/EEC (Directive of Sanitary Products) amended by Directive 2007/47/EC.
2. **Tube with transport media**: container facilitator of survival and transport of biological samples prior to analysis.

Classified as in vitro diagnostic IVD (according to Directive 98/79/EC).

Transport media

The media used to transport the sample, has the appropriate chemical composition that maintains the bioburden levels with the minimum physiological activity, achieving thus the minimal quantitative and qualitative variation of the sample from the collection to its analysis.

Components:

Each set consists in a tube and a swab, packed in a peel-pack bag (A) and sterilised by radiation.

(B) **Tube with transport media:** Made of rigid polypropylene with round bottom.
(C) Polyethylene **cap** specially designed to close hermetically; non slippery surface when using gloves.
(D) Coloured **label** in each tube with the following parameters printed: transport media type, sterilisation method, manufacturer name, CE mark, "single use" and "see the instructions" marks, lot number and expiry date, as well as spaces to write patient name, date, time, medical report number, source and kind of sample. The label seals the cap and the tube.
(E) **Swab** fitted in a second cap with a shaft which ends in a tip of synthetic or organic material hardly adhered to the shaft. The cap provides a leakproof seal after sample collection.

Both the peel-pack package and the label of the tube are printed with the following information: transport media type, sterilization method, manufacturer name, CE mark, "single use" and "see the instructions" marks, lot number, and expiry date. Peel pack also includes bar code.

Amies. Sterile

Swab: CE class IIa (MDD)
Tube with media: CE (IVD)

AMIES media is a modification of Cary Blair media, which is at the same time a modification of Stuart media.
Basically the glycerophosphate is replaced by an inorganic phosphate, and the methylene blue by pharmacological charcoal.
Calcium and magnesium are also added, thus maintaining the permeability of the bacterial cell.
This media assures the viability of organisms such as:

- Neisseria sp.
- Haemophilus sp.
- Corynebacterium sp.
- Trichomonas vaginalis
- Streptococcus pyogenes
- Streptococcus pneumoniae
- Shigella flexneri
- Salmonella typhi
- Brucella abortus
- Enterobacterias, etc.

The presence of charcoal on the media neutralises inhibitors and bacterial toxins, and improves the recovery ratio of Neisseria gonorrhoeae and Vibrio cholerae

Some microorganisms can resist on the media for up to 3 days, although the recovery of microorganisms is better if cultured in the first 24 hours. Amies transport swabs are available with or without charcoal.
Swabs are sterilised by radiation. Peel-pack dimensions: 38 x 210 mm.
Expiry date: 30 months after sterilisation date.

code	description	case quantity	case weight	case volume	cases per pallet
300287	snappable polystyrene + viscose	6 x 100	8.5	0.055	32
300285	snappable polystyrene + viscose (with charcoal)	6 x 100	9.18	0.052	32
300281	aluminum + viscose	6 x 100	9.15	0.057	32
300281/1	aluminum + viscose (with charcoal)	6 x 100	9.15	0.052	32
NEW **300281T**	twisted aluminum + viscose	6 x 100	8.24	0.057	32
NEW **300281TC**	twisted aluminum + viscose (with charcoal)	6 x 100	8.24	0.057	32

Liquid Amies. Sterile

Swab: CE class IIa (MDD)
Tube with media: CE (IVD)

This is a variation of the traditional Amies media swab where the media is presented on liquid form without agar.
Suitable for conservation of pathogens such as:

- Haemophilus sp.
- Corynebacterium sp.
- Trichomonas vaginalis
- Streptococcus pyogenes
- Streptococcus pneumoniae
- Shigella flexneri
- Salmonella typhi
- Brucella abortus
- Staphylococcus epidermidis
- Escherichia coli, etc.

Media is supplied in its liquid form, in a sponge, suitable for direct extensions on slides. **Swabs are sterilised by radiation.**
Peel-pack dimensions: 38 x 210 mm.
Expiry date: 30 months after sterilisation date.

code	description	case quantity	case weight	case volume	cases per pallet
300284	snappable polystyrene + viscose	6 x 100	7.5	0.057	32

Stuart swabs. Sterile

Swab: CE class IIa (MDD)
Tube with media: CE (IVD)

The modified Stuart media allows the conservation and transportation of a large number of pathological microorganisms, such as:

- Neisseria gonorrhoeae
- Heamophilus influenzae
- Neisseria meningiditis
- Bordetella pertusis
- Corynebacterium diphteriae
- Trichomonas vaginalis
- Staphylococcus aeureus
- Streptococcus sp.
- Salmonella sp.
- Shigellas sp.
- etc.

The most unstable organisms will remain viable for up to 24 hours and other for several days. The media is reduced due to the presence of thioglycolate, which difficults the enzymatic reactions of the bacteria.
The multiplication of the bacteria is prevented due to the lack of nitrogen in the media.
Swabs are sterilised by radiation.
Dimensions of the peel-pack: 38 x 210 mm.
Expiry date: 30 months from sterilisation date.

code	description	case quantity	case weight	case volume	cases per pallet
300290	wood + cotton	6 x 100	8.5	0.052	32
300291	aluminium + cotton	6 x 100	8.5	0.052	32
300295	snappable polystyrene + viscose	6 x 100	8.5	0.052	32
NEW **300295C**	snappable polystyrene + viscose (with charcoal)	6 x 100	8.9	0.057	32
NEW **300292**	twisted aluminium + viscose	6 x 90	7.6	0.057	32

Cary Blair. Sterile

Swab: CE class IIa (MDD)
Tube with media: CE (IVD)

Cary Blair is another modification of Stuart media.
The glycerophosphate has been substituted by inorganic phosphate since glycerophosphate is a metabolite for some bacteria, so they could grow and disgrise the pathogens amount.
The methylene blue has also been removed and the pH increased to 8.4.
This is a media originally developed for faecal samples but is also used successfully for anaerobic transport, such as:

- Neisseria gonorrhoeae
- Vibrio cholerae
- Vibrio parahaemolyticus
- Heamophilus influenzae
- Neisseria meningiditis
- Bordetella pertusis
- Streptococcus pneumoniae
- Shigella flexneri
- Pasteurella pestis
- Campylobacter Spp., etc.

Swabs are **sterilised by radiation**.
Dimensions of the peel-pack: 38 x 210 mm.
Expiry date: 30 months from sterilisation date.

code	description	case quantity	case weight	case volume	cases per pallet
300280	wood + cotton	6 x 100	8.5	0.052	32
300280.2	snappable polystyrene + viscose	6 x 100	8.5	0.052	32

Media for virus. Sterile

Swab: CE class IIa (MDD)
Tube with media: CE (IVD)

This viral transport media preserves the specimen during transportation to the laboratory.
Suitable, among many others:

- Papiloma
- Pseudorrabia
- Influenza aviar (H7N1)
- Influenza A (H1N1) o H1N1/09 pandemic
- Suis herpesuirus, etc.

The media maintains the sample viable for up to 72 hours and in some cases for longer time.
The addition of antimicrobial substances inhibit the growth of bacteria and fungi. Ideal for nasal, pharyngeal, ocular, skin and mucus samples.
Media is supplied in its liquid form, in a sponge, suitable for direct extensions on slides.
Swabs are **sterilized by radiaton**.
Expiry date: 18 months from sterilisation date.

code	description	case quantity	case weight	case volume
300297	snappable polystyrene + polyester	6 x 100	7.8	0.052
300294	aluminium + polyster	6 x 100	7.8	0.052

Minimum order quantity: 100 units.
Cases per pallet: 32.

Media for Chlamydia. Sterile

Swab: CE class IIa (MDD)
Tube with media: CE (IVD)

Liquid media, suitable for Chlamydia.
For cervical samples it is recommended to firstly use a dry swab to clear the cervical channel.
Media is supplied in its liquid form, in a sponge, suitable for direct extensions on slides. **Sterilised by radiaton**.
Expiry date: 12 months from sterilisation.

code	description	case quantity	case weight	case volume
300299	snappable polystyrene + polyester	6 x 100	7.8	0.052

Minimum order quantity: 100 units.
Cases per pallet: 32.

90 x 14 mm Petri Dish

Made in polystyrene.
Supplied in groups of 20 units, packaged in heat sealed bags.
Code **200200** is **aseptic**.
Code **200209** is **sterile by radiation.**
Suitable for automatic filling machines.

code	description	sterile	case quantity	case weight	case volume	cases per pallet
With three vents						
200200	Ø 90 x 14 mm	no	25 x 20	7.71	0.071	28
200209	Ø 90 x 14 mm	RADIATION	25 x 20	7.50	0.071	28
Not vented dishes, for the cultivation of anaerobic						
200200.4	Ø 90 x 14 mm	no	25 x 20	6.90	0.071	28

90 x 14 mm Petri Dish, two compartments

Made in polystyrene. **Aseptic**.
With three vents.
Supplied in groups of 20 units, packaged in heat sealed bags.
Suitable for automatic filling machines.

code	description	case quantity	case weight	case volume	cases per pallet
200202	Ø 90 x 14 mm 2 compartments	25 x 20	7.46	0.072	28

90 x 14 mm Petri Dish, three compartments

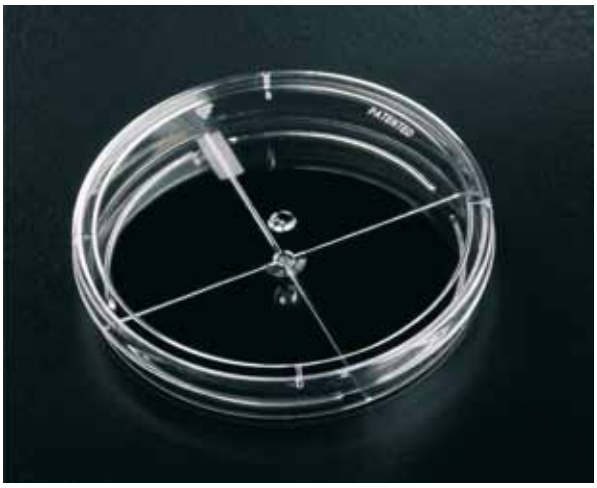
Made in polystyrene. **Aseptic**.
With three vents.
Supplied in groups of 20 units, packaged in heat sealed bags.
Suitable for automatic filling machines.

code	description	case quantity	case weight	case volume	cases per pallet
200203	Ø 90 x 14 mm 3 compartments	25 x 20	7.82	0.070	28

90 x 15 mm Petri Dish, four compartments

Made in polystyrene. **Aseptic**.
Vented.
Supplied in groups of 24 units, packaged in heat sealed bags.
Suitable for automatic filling machines.

code	description	case quantity	case weight	case volume	cases per pallet
200210	Ø 90 x 15 mm 4 compartments	24 x 25	9.20	0.077	28



Petri Dish 90 x 15 mm with internal cross

Made in polystyrene. **Aseptic**.
With four vents. Stackable.
With a mark on a side that helps orientation and a writing area on the bottom.
Supplied in groups of 25 units, packaged in heat sealed bags.
Suitable for automatic filling machines.
Internal cross guarantees the totally flat base.

code	description	case quantity	case weight	case volume	cases per pallet
200200.5	Ø 90 x 15 mm internal cross	24 x 25	7.50	0.076	20

140 x 20 mm Petri Dish

Made in polystyrene. With three vents.
Supplied in groups of 10 units, packaged in heat sealed bags.
Suitable for automatic filling machines.
Code **200214** is **aseptic**.
Code **200219** is **sterile by radiation**.

code	description	sterile	case quantity	case weight	case volume	cases per pallet
200214	Ø 140 x 20 mm	no	12 x 10	5.84	0.068	30
200219	Ø 140 x 20 mm	**RADIATION**	12 x 10	5.18	0.066	30

120 x 120 mm squared Petri Dish

Made in polystyrene. **Aseptic**.
With four vents.
Supplied in groups of 10 units, packaged in heat sealed bags.
Suitable for automatic filling machines.

code	description	case quantity	case weight	case volume	cases per pallet
200204	120 x 120 mm	24 x 10	11.18	0.070	28

55 x 14 mm Petri Dish

Made in polystyrene. With four vents.
Supplied in groups of 15 units, packaged in heat sealed bags.
Suitable for automatic filling machines.
Code **200201** is **aseptic**.
Code **200201.B** is **sterile by radiation**.

code	description	sterile	case quantity	case weight	case volume	cases per pallet
200201	Ø 55 x 14 mm	no	80 x 15	8.36	0.068	30
200201.B	Ø 55 x 14 mm	**RADIATION**	80 x 15	8.40	0.068	30

Ø 100 mm Petri dish baskets

These stainless steel baskets are suitable for dishes of diameter up to 10 cm.
Two models available to hold 10 or 20 Petri dishes.

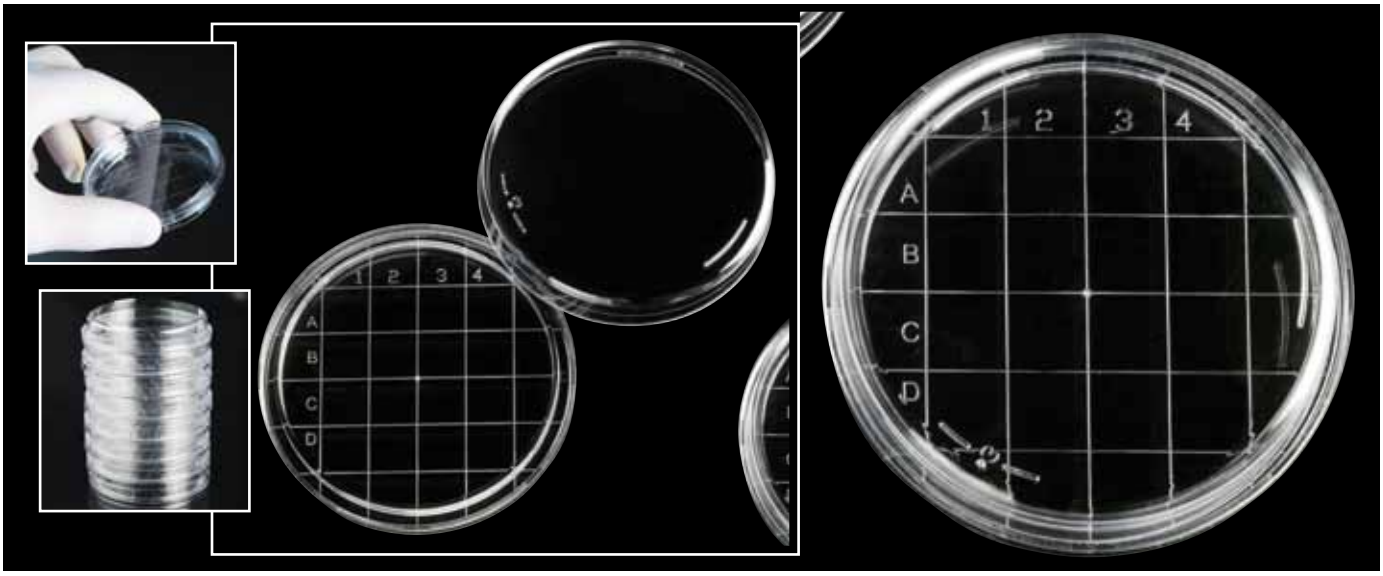
code	description	dimensions* mm (height without handle)	height with handle mm	case quantity	case weight	case volume
H-600	1 section, holds up to 10 dishes	105x110x250	110	1	0.13	0.005
H-601	2 sections, holds up to 20 dishes	105x215x250	110	1	0.28	0.009

*Lenght x width x height.
Heigh with handle: 360 mm.
We can supply customer-designed models.

Moulded 90 or 100 mm Petri dish rack

Useful for safe transport and incubation 90 or 100 mm Petri dishes and helpful to streamline bench top sample processing.
Each rack holds up to forty-two Petri dishes with lids, configured in six columns of seven plates.
Up to 4 racks can be stacked together, and all interlock to prevent accidental knock over.
Access slots under the bottom Petri dishes allows a stack of dishes to be safely removed from the rack using a secure ring that places a finger under the bottom dish and thumb on top of the lid if the top dish.
A large centre divider provides space for labelling and incorporates a handle.
All parts are moulded with white polypropylene and are steam **autoclavable at 121 ºC**.
Racks are supplied individually bagged, flat, and can be easily assembled (instructions included).

code	dimensions mm	case quantity	case weight	case volume
H-611	330 x 210 x 178	1	0.350	0.004



Contact plates

Aseptic production.
Used in the pharmaceutical or food-processing industry, hospital environments for determining bacterial contamination of surfaces such as the skin, operating tables, refrigerated gondolas, and work surfaces.
They are manufactured in transparent polystyrene.
The moulded grid at the bottom makes it possible to identify the detected contamination per cm^2 and it facilitates the counting of colonies.
Stable stacking: The shape of the lid makes stacking perfectly stable during transport and incubation, and saves space on work surfaces.
Dimensions of the dish: 65,7 mm x 14,7 mm height.

code	description	sterile	case quantity	case weight	case volume	cases per pallet
200208	Rodac contact plate	no	25 x 20	5.00	0.034	70
200218	Rodac contact plate	**RADIATION**	25 x 20	5.00	0.034	70

See chapter 5. **Sampling and transport**

See chapter 4. **Histology, microscopy and staining**

Moulded contact plate rack

Useful for safe transport and incubation of Rodac contact plates and helpful to streamline bench top sample processing.
Each rack holds up to 60 contact plates with lids (minimum diameter: 65 mm, maximum diameter: 72 mm) configured in six columns of ten plates. Up to 4 racks can be stacked together, and all interlock to prevent accidental knock over.
Access slots under each stack of contact plates allows a stack of plates to be safely removed from the rack using a secure ring that places a finger under the bottom plate and thumb on top of the lid if the top plate. A large centre divider provides space for labelling and incorporates a handle.
All parts are moulded with white polypropylene and are steam **autoclavable at 121 °C**.
Racks are supplied individually bagged, flat, and can be easily assembled (instructions included).

code	dimensions mm	case quantity	case weight	case volume
H-610	266 x 165 x 178	1	0.33	0.002

Stackable Petri dish incubation tray

This polypropylene tray increases overall capacity of incubator.
Designed to hold five 100 mm diameter or fifteen 60 mm diameter Petri dishes, it's provided with two large label areas for critical sample identification by marker or label.
With 16 vents.
Not autoclavable.

code	dimensions mm	bag quantity	bag weight	bag volume
H-615	251 x 237 x 35	3	0.75	0.0105

Microtitre plates, sterile

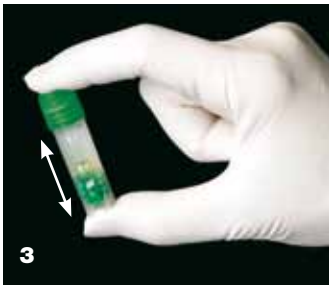
Standard 96 well-plate made of crystal-clear polystyrene.
Three models with different well shapes are available.
In general terms, flat bottom plates are used when optical reading is required (for example, using a spectrophotometer); rounded and conical bottom plates are very useful when total recovery of the sample is required; they also offer better performance than flat bottom plates for sample separation through centrifugation.

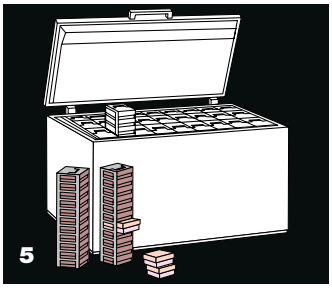
Some applications:
- Diluting
- Serial sample preparation
- Protein precipitation
- Hemagglutination
- Conical bottom plates may be used for complement fixation
- Flat bottom plates are also suitable for cell growth in suspension, and for ELISA applications, when there is no need of a pre-treated plate (which enhances the antigen-antibody adhesion to the surface of the plate)

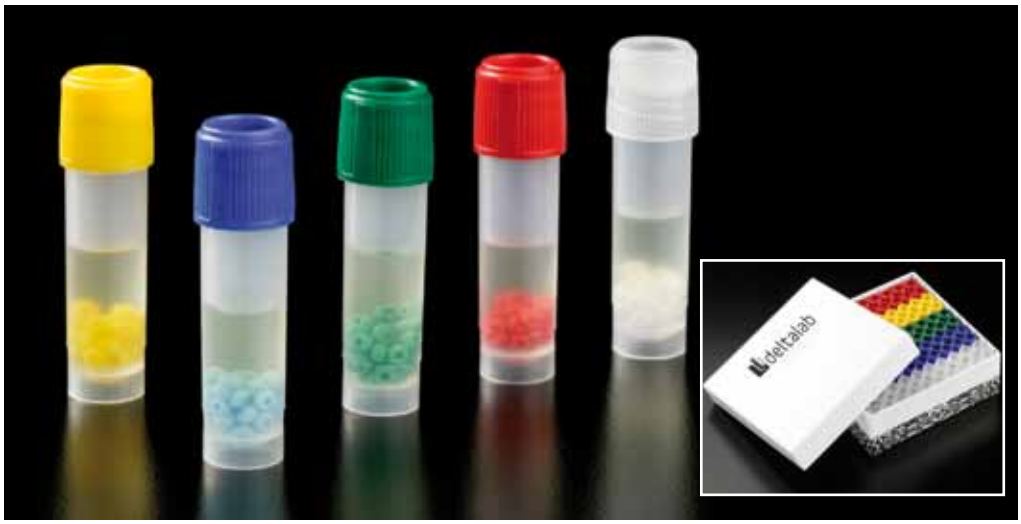
Polystyrene lids are supplied separately, see code **900015**.
Those plates can also be covered using the sealing mat or the adhesive sealing film presented on page 62.
Available in two versions: non sterile in bags of ten units, or sterilized and individually wrapped.

Plate dimensions: 127.7 x 85.8 mm.
Well plate estimate volume:
900010: 0.281 µl.
900011: 0.404 µl.
900012: 0.219 µl.

code	description	sterile	case quantity	case weight	case volume
900010	microtitre plate "U" form	RADIATION	50	2.33	0.013
900010.1	microtitre plate "U" form	non	5 x 10	2.33	0.014
900011	microtitre plate "**U**" form	RADIATION	50	2.33	0.013
900011.1	microtitre plate "**U**" form	non	5 x 10	2.33	0.013
900012	microtitre plate "V" form	RADIATION	50	2.33	0.013
900012.1	microtitre plate "V" form	non	5 x 10	2.33	0.013
900015	lid for microtitre plate	RADIATION	50	1.16	0.013
900015.1	lid for microtitre plate	non	5 x 10	1.16	0.013







CRYOINSTANT: Porous beads for microbiological culture preservation

CryoInstant is an excellent preservation system for storing microbiological culture (for example fungus on sporulation phase), consisting on **2 ml cryovials** containing 25 porous beads and cryopreservative-added broth.
With these vials we can:

- Get a **perfect freezing storage system**.
- Obtain up to **25 replicates** from the original microorganism, to use them during many years
- **Ease** the **recovery** of the **stored strain** streaking an inoculated bead directly onto solid media
- **Prevent changes** and **repetitive thawing / freezing** of the rest of beads
- **Avoid** the **growth** of **ice** when recovering,
- **Improve recovery rates** of frozen cultures by adding cryopreservative to broth
- **Minimise** the **risk of cross contamination**,
- **Save space** in the freezers when storing.

The external thread cryovials are made of polypropilene (page 145). Their smooth inner surface prevents from contamination. Their caps embody a silicone washer to ensure a positive leakproof seal. Tubes and caps withstand up to **–190 ºC**.
In order to ease the classification of the samples, we offer the possibility to get cryovials with caps and beads in five different colours: every code displays caps and beads from a single and same colour (excepting code **409113/6**, which is an assortment), allowing a fast and easy identification of the samples, and providing a system whereby users are able to code different bacterial species, different samples, different laboratories, etc. And even more: with colour coded inserts (described on page 144) a further classification can be made.
Cryovials are presented in carton boxes (resistant to **–100 ºC**; dimensions: 150x150x55 mm) with 100 units; boxes are furtherly described in page 206. Each box is supplied plastic-wrapped and labelled with code reference, batch, expiration date and specifying the colour of the caps and beads.

code	beads and cap colour	case quantity	case weight	case volume
409113/1	white	100	0.53	0.002
409113/2	blue	100	0.53	0.002
409113/3	yellow	100	0.53	0.002
409113/4	red	100	0.53	0.002
409113/5	green	100	0.53	0.002
409113/6	assorted: 5 colours x 20 cryovials	100	0.53	0.002

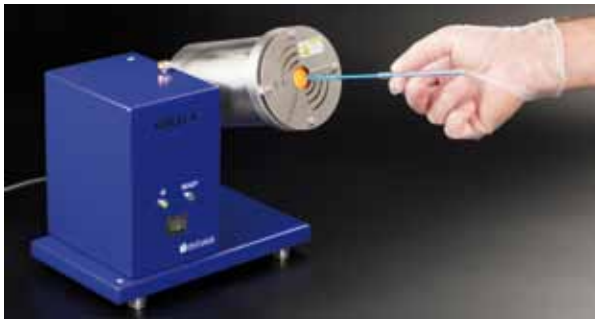
Way of use:

1. Take the sample from the strain with a loop (please see our loops on page 32 and 33)
2. Inoculate the cryovial by putting the loop in contact with the broth
3. Close the cryovial and shake it gently in order to permeate the strain into the beads
4. Extract the cryopreservative-added broth with a Pasteur pipette (see our plastic pipettes on pages 189-193)
5. Close the cryovial and take it to the freezer
6. Every time we need to reproduce the strain, we will take a bead with a loop or a forceps
7. We will put it down on a Petri dish with culture medium, attempting to put in contact all the surface of the bead with the medium

Nichrome loops microincinerator

Desktop microincinerator for sterilization of Nichrome loops.
The device reaches a burning temperature of about **1000 °C** inside, but their external temperature does not exceed **30 °C**.
In this way there is no danger of burns and can be manipulated with gloves without any problem.
After reaching the sterilization temperature in 7 minutes, the loop is fully sterilized in only 2 seconds.
The material of the tube where the sterilization is performed is quartz so that it prevents the formation of aerosols.
Dimensions: 150x250x215 mm.

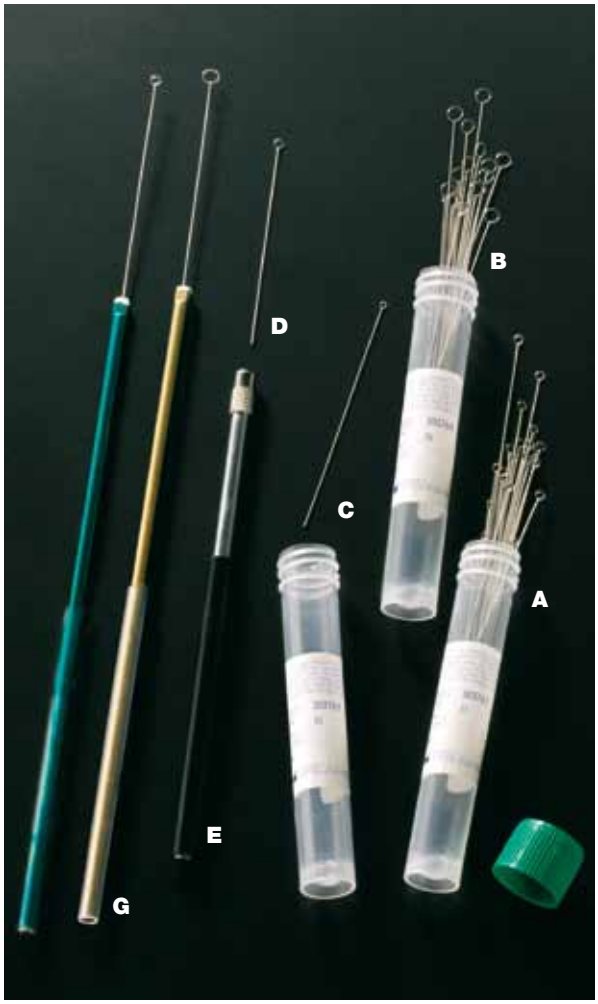
code	description	case quantity	case weight	case volume
DEL001	loops microincinerator	1	5.0	0.015

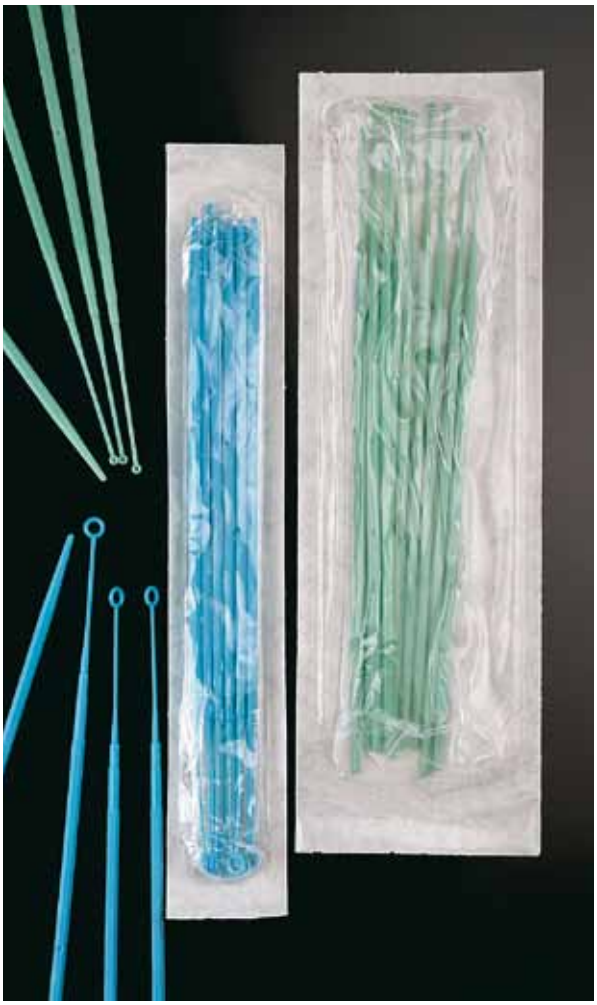


Nichrome wire loops

Nichrome wire loops for microbiology.
Comparing them to the traditional loops made of platinum and rhodium, the nickel and chrome alloy results much more competitive in terms of durability and price. Moreover, it offers a totally smooth surface, and rapid cooling after heat sterilisation.
Non-calibrated loops (mod. A and B):
Non-calibrated nichrome loops, without holder, saving money and storage space. Supplied in groups of 25 units, in one tube, specifying code, description, and lot.
Calibrated loops (mod. C and D):
Calibrated nichrome loops. Supplied individually in a capped tube, labeled with the code, description and lot.
Calibrated and non-calibrated loops are easily joinable to the PVC and aluminium holder **(mod. E)** with an easy and fast screw movement.
Dimensions of the aluminium holder 150 mm.
Non-calibrated loops with holder (mod. F and G):
Non-calibrated loop made of nichrome alloy.
Light aluminium holder (**mod. G**, golden colour, **mod. F,** green) partially protected by a transparent, insulating, non-skid plastic. Dimensions, 275 mm.

mod.	code	description	quantity
A	**302762**	Non-calibrated loop 2 mm Ø	25
B	**302764**	Non-calibrated loop 4 mm Ø	25
C	**302771**	Calibrated loop 1 µl	1
D	**302772**	Calibrated loop 10 µl	1
E	**302780**	Loop holder, PVC and aluminium	1
F	**302792**	Non-calibrated loop (2 mm Ø) with holder	5
G	**302794**	Non-calibrated loop (4 mm Ø) with holder	5





Sterile calibrated loops

Manufactured in flexible polystyrene.
Sterilized by radiation.
Two sizes available: 1 µl and 10 µl.
Very flexible loop, with rounded tip.
Not recommended for colony counting.
Sterile inoculating loops.
Batch and expiry date printed on the bag.

code	µl	presentation	colour	case quantity	case weight	case volume
302703	1	10 ud./peel-pack	green	4 x 500	5.00	0.012
302723	1	20 ud./peel-pack	green	4 x 1,000	7.40	0.039
302704	10	10 ud./peel-pack	blue	4 x 500	5.00	0.037
302724	10	20 ud./peel-pack	blue	4 x 1,000	7.80	0.039

Digralsky spreader. Sterile

Designed for surface spreading. Made of white polystyrene.
Radiation sterilized.
Total length: 149 mm, base length: 40 mm.
Base length allows spreading liquid samples over any type of Petri dish and avoids contact with the dish walls.
The curved Spreader extremity and rounded corners avoid damaging media surface while spreading.
The tip bent and rounded edges minimize the possibility of breakage of the solid medium during extension.
It allows their use in places where sterilization before use is not possible (for instance when samples are collected far from the lab).
Available in peel-pack containing 1 or 5 units, marked with code, expiry date and lot.

code	presentation	case quantity	case weight	case volume
200500	5 units peel-pack	200 x 5	3.6	0.025
200510	1 unit peel-pack	500	3.1	0.025

Sterile culture tubes in polystyrene

Tubes supplied with either a two position ribbed polyethylene cap, which can be left loose for aerobic work or sealed for anaerobic cultures.
They are biologically inert, exempt from mold release agents, and withstand up to **1,400 xg** and **70 ºC**.
Packaged in self-standing resealable zip-lock bags of 125 units.

code	dimensions mm	case quantity	case weight	case volume
300807	12 x 75	8 x 125	4.24	0.033
300808	17 x 100	8 x 125	7.14	0.060

Loose position for aerobic work

PosSealed position for anaerobic cultures

EUROTUBO® 12 ml screw cap tubes, round bottom

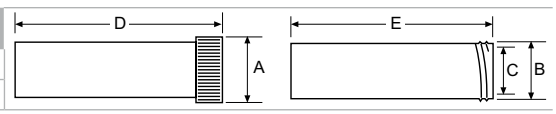
CE (IVD)

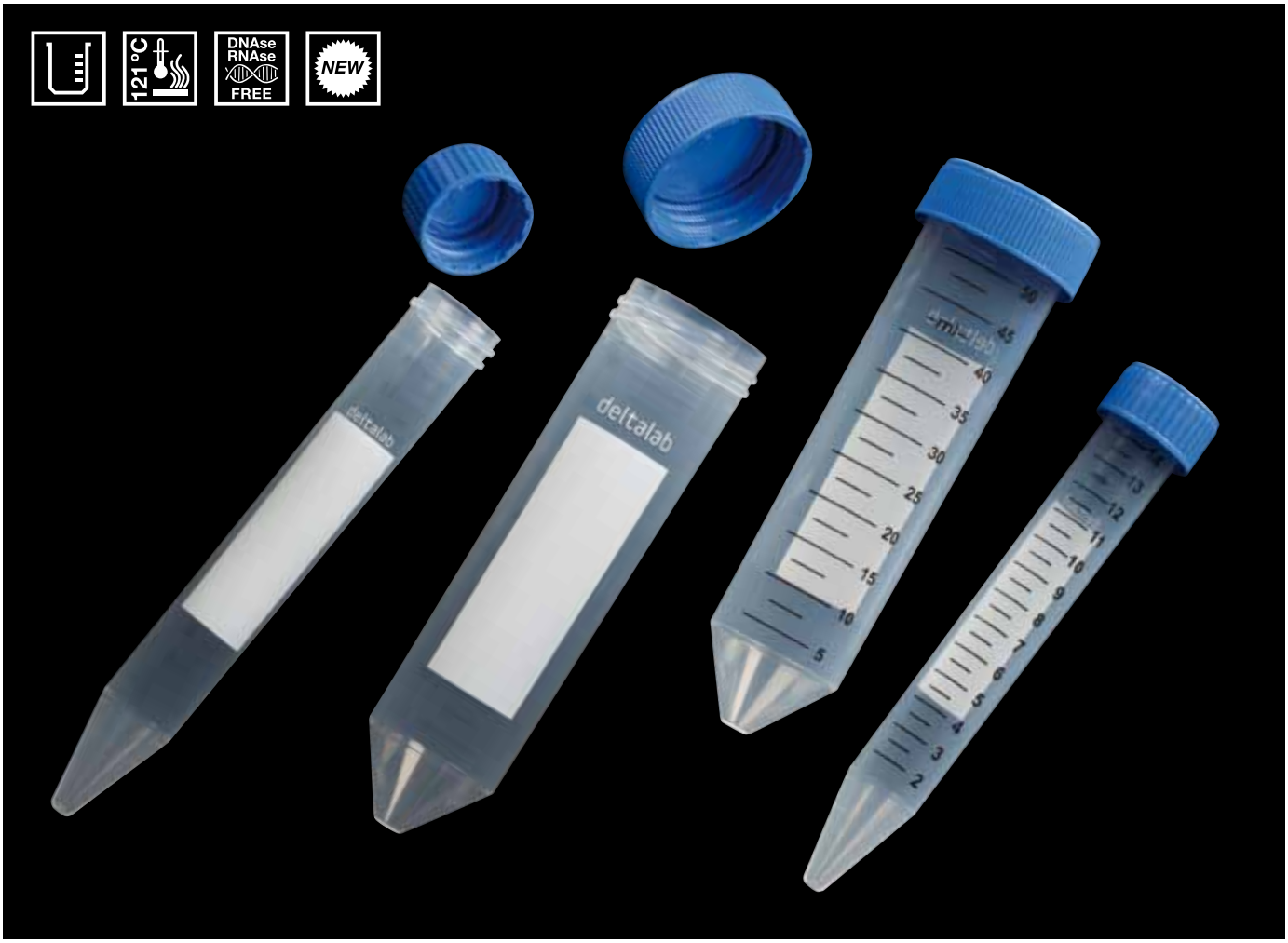
Made of **autoclavable** (**121 ºC**) transparent polypropylene or polystyrene. Green cap made of high density polyethylene. Dimensions: 15 x 102 mm. The external skirt allows the tubes to remain **free-standing.** Supplied screwed. Recommended volume: 12 ml. The sterile model (ethylene oxide) is supplied individually in flow-pack bag, with indication of batch, expiration date, etc.
According to the guidelines for sterile products. Resistance to centrifugation: **PS: 7,500 xg. PP: 15,000 xg.**
Attention: For autoclaving, the cap should be loose on the thread and not tightly fitted.

mod.	code	description	maximum volume ml	volume recom. ml	case quantity	case weight	case volume	cases pallet
1	**301403**	polystyrene	14.4	12	6 x 250	12.66	0.082	20
2	**301402**	STERILE EO polystyrene individually wrapped	14.4	12	6 x 250	13.00	0.096	16
3	**401402**	STERILE EO polypropylene individually wrapped	14.2	12	6 x 250	11.80	0.096	16
4	**401403**	high transparency polypropylene	14.2	12	6 x 250	11.00	0.082	20

Dimensions (±0,09):

code	external cap Ø mm A	external tube Ø mm B	internal tube Ø mm C	length with cap mm D	length without cap mm E
301402, 301403	20.9	16.3	14.4	103.9	102.5
401402, 401403	20.9	16.2	14.3	102.9	101.5





15 ml and 50 ml centrifugal tubes

CE (IVD)

Made of polypropylene, suitable for both clinical and research applications.
DNAsa, RNAsa and pyrogen free. They are also free from natural rubber and heavy metals.
High transparency of the material for a clear visualization during experiments specially for molecular biology and animal tissue culture.
Tube and cap designed with the system of flat threads for a complete leakproof.
Highly smooth hydrophobic surface for minimum disturbance during centrifugation.
Silk-screen blue graduation in the tube and large white frosted portion for easy writing.
Autoclavable at 121 ºC.
Centrifugation resistance: **14.000 xg**.
Available models: 15 ml non-skirted and 50 ml skirted and non-skirted.

code	description	presentation	sterile	case weight	case volume	cases per pallet
15 ml tubes						
429940	non-skirted tube	500 tubes in bulk	NO	500	4.5	0.0264
429945	non-skirted tube	20 bag to 25 tubes.	NO	500	4.6	0.0264
429942	non-skirted tube	20 bag to 25 tubes.	**STERILE R**	500	4.6	0.0264
50 ml tubes						
429930	non-skirted tube	20 bag to 25 tubes.	NO	500	8	0.0663
429931	non-skirted tube	20 bag to 25 tubes.	**STERILE R**	500	8	0.0663
429950	skirted tube	20 bag to 25 tubes.	NO	500	9	0.0663
429951	skirted tube	20 bag to 25 tubes.	**STERILE R**	500	9	0.0663

EUROTUBO® 15 ml conical tubes

CE (IVD)

Tubes made of transparent polypropylene, conical bottom, suitable for centrifugation tests in immunology, microbiology, etc. Continuous thread, external moulded graduations in 0,5 ml increments.
Frosted area (55 x 10 mm).
Blue cap in polyethylene with hermetical closure thanks to its internal elastic obturation.
Code **429910** is autoclavable (**121°C**) with the cap not being closed, just placed on the thread. Autoclave not recommended for the codes **429920** and **429946**, as they have been **sterilised by radiation**.
Code **429920** is supplied sterile in 25 microns polyethylene bags (100 units).
The bag specifies IVD, lot number, expiration date, etc.
Code **429946** is supplied sterile in individual bags. Resistance to centrifugation: **7,000 xg** (non sterile model) and **5,000 xg** (sterile models)**.**
Length (with cap): 120 mm. External mouth diameter: 17 mm. External cap diameter: 20,9 mm.

code	description	case quantity	case weight	case volume	cases per pallet
429910	non sterile	500	3,8	0,029	54
429920	**STERILE**	5 x 100	3,9	0,029	54
429946	**STERILE R** individually bagged	500	3,9	0,038	40

Please find racks for these tubes in Chapter 9. **Sample Storage**

EUROTUBO® 50 ml conical tubes

CE (IVD)

Tubes made of transparent polypropylene, conical bottom, suitable for centrifugation tests in immunology, microbiology, etc. Perfect to analyse Koch bacillus. Continuous thread, external moulded graduations in 5 ml increments. Blue cap in high density polyethylene with hermetical closure thanks to its internal elastic obturation. Skirted and non skirted versions, sterilised by radiation and non sterilised versions.
Sterile codes are either supplied in individual bags (codes **429926**, **429927**), in bags of 100 units (codes **429926.10, 429927.10**), or in bags of 25 units (codes **429926.25**, **429927.25**) and resist up to **7,000 xg.** Autoclave not recommended as they have been ionised. Non sterile codes withstand up to **12,000 xg** and are autoclavable (**121 °C**) with the cap loose on the thread and not tightly fitted.
Every version is supplied capped, excepting code **429900SP**, which is supplied uncapped, with the cap in a separated bag.

code	description		external cap Ø mm	internal tube Ø mm	external tube Ø mm	length with cap mm	case quantity	case weight	case volume	cases per pallet
429900	non skirted		34.4	27.2	29.5	117.5	500	7.9	0.075	20
429900SP	non skirted, unscrewed cap		34.4	27.2	29.5	117.5	500	7.9	0.082	20
429901	skirted		34.4	27.2	29.5	117.5	500	8.5	0.082	20
429926	**STERILE**	non skirted, individually wrapped	34.4	27.2	29.5	117.5	500	8.2	0.082	20
429926.25	**STERILE**	non skirted, bag 25 units	34.4	27.2	29.5	117.5	20x25	8.2	0.082	20
429926.10	**STERILE**	non skirted, bag 100 units	34.4	27.2	29.5	117.5	5x100	7.9	0.082	20
429927	**STERILE**	skirted, individually wrapped	34.4	27.2	29.5	117.5	500	8.8	0.082	20
429927.25	**STERILE**	skirted, bag 25 units	34.4	27.2	29.5	117.5	20x25	8.8	0.082	20
429927.10	**STERILE**	skirted, bag 100 units	34.4	27.2	29.5	117.5	5x100	8.5	0.082	20

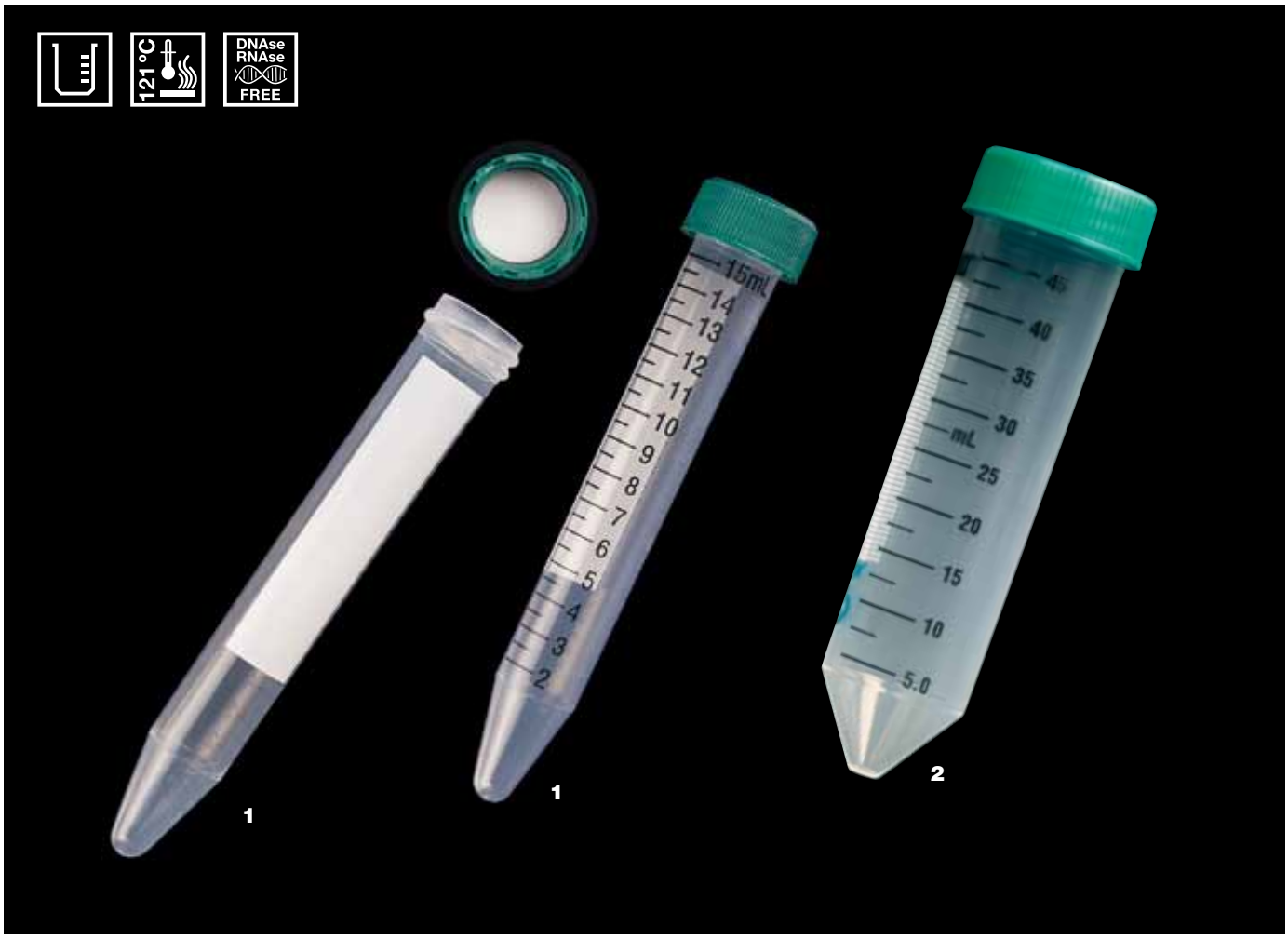
Please find racks for these tubes in Chapter 9. **Sample Storage**

POLYPROPYLENE RACKS:

- **W-018**
- **19568**
- **19570**

METAL RACKS:

- **R-292**
- **R-293**
- **R-281**
- **R-282**
- **R-283**

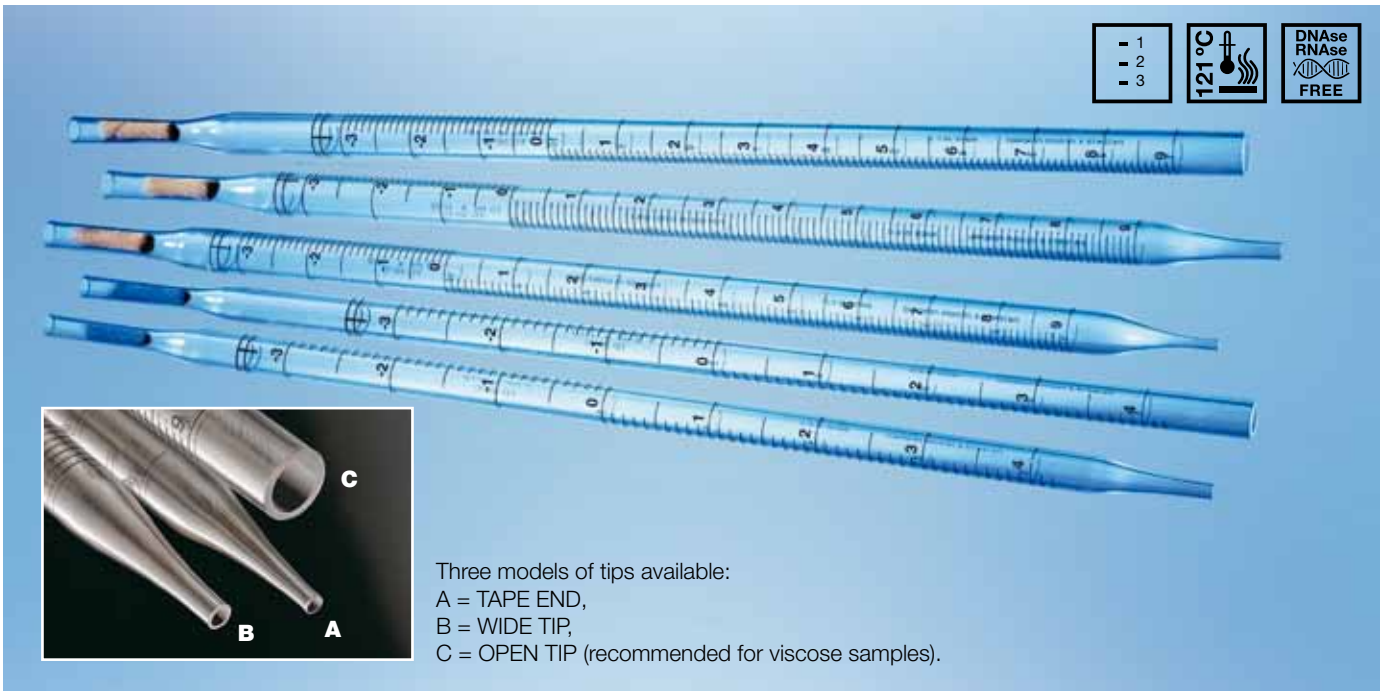


15 ml and 50 ml conical high resistance tubes. Sterile

CE (IVD)

Tubes made of transparent, copolymer polypropylene.
Green caps made of polyethylene with an internal liner which ensures leakproofness.
Tubes feature a solvent resistant white panel and black graduations for use both for clear or dark samples.
DNAse, RNAse, endotoxins and metal free.
They are sterile by radiation and withstand temperatures down to **–90 °C** (15 ml) and **–80 °C** (50 ml)..
Resistance to centrifugation: **17,000 xg** (15 ml) and **20.000 xg** (50 ml).
Autoclavable tube (the liner of the cap is not autoclavable)
Supplied in bags of 50 units.
Bags are printed with instructions for use and feature a double closure: a first tamper evident seal that helps guaranteeing sterility, and a secondary zip-lock, resealable closure.

	code	presentation	capacity ml	dimensions mm	case quantity	case weight	case volume
1	**409920**	bag 50 units	15	17 x 118	10 x 50	4.12	0.035
2	**409922**	bag 50 units	50	29.6 x 114.6	10 x 50	8.16	0.076



Three models of tips available:
A = TAPE END,
B = WIDE TIP,
C = OPEN TIP (recommended for viscose samples).

Sterile serological pipettes

Single use, made of crystal polystyrene. Accuracy > 98 %.
Sterilised by radiation. Made in **one piece** for an optimum precision, except code **90043** (50 ml).
No liquid retention: as tip is not sealed, liquid is not held at the joint. Total dispensing guaranteed.
Non pyrogenic (ISO 10993-11), non cytotoxic (ISO 10993-5) and non haemolytic (ISO 10993-4). **DNase and RNase free.** Volumes range from 1 to 50 ml. Pipettes include a coloured cotton plug for better identification. The peel-pack have a **fiber-free** packaging including a strip for easy opening. Black graduations are bright, black and **permanent**. 5, 10 and 25 ml models have negative graduations for extra capacity, and a second reverse scale (ascending and descending).

code	capacity ml	presentation	cotton colour	case quantity	tip	graduation ml	negative graduation ml	total capacity ml	case weight	case volume	cases palet
900030	1	1 peel-pack	●	4 x 500	A	0/0.9	until –0.3	1.3	10.00	0.068	24
900031	1	bag of 25	●	4 x 1,000	A	0/0.9	until –0.3	1.3	14.52	0.071	30
900130	1	1 peel-pack	●	4 x 500	C	0/0.9	until –0.3	1.3	10.10	0.071	30
900131	1	bag of 25	●	4 x 1,000	C	0/0.9	until –0.3	1.3	14.00	0.071	25
900032	2	1 peel-pack	●	4 x 500	A	0/1.8	until –0.4	2.4	11.60	0.068	30
900033	2	bag of 25	●	4 x 1,000	A	0/1.8	until –0.4	2.4	17.20	0.071	30
900034	5	1 peel-pack	●	4 x 250	A	0/4	until –3	8	12.20	0.071	24
900038	5	bag of 25	●	4 x 375	A	0/4	until –3	8	15.00	0.071	30
NEW **900144N**	5	1 peel-pack	●	4 x 250	B	0/4	until –3	8	12.20	0.072	30
NEW **900134N**	5	1 peel-pack	●	4 x 250	C	0/4	until –3	8	12.20	0.072	30
900036	10	1 peel-pack	●	4 x 200	A	0/9	until –3	13	11.07	0.071	24
900037	10	bag of 25	●	4 x 250	A	0/9	until –3	13	13.08	0.071	30
NEW **900146N**	10	1 peel-pack	●	4 x 200	B	0/9	until –3	13	11.20	0.072	30
NEW **900136N**	10	1 peel-pack	●	4 x 200	C	0/9	until –3	13	11.20	0.072	30
900041	25	1 peel-pack	●	4 x 100	A	0/23	until –10	35	11.20	0.072	24
900043	50	1 peel-pack	●	4 x 25	A	1/2	until –10	60	3.60	0.072	60

Find trays, rotary stands and other products for pipettes in Chapter 11. **Safety and General Labware**

Please find racks for these tubes in Chapter 9. **Sample Storage**

See our plastic Pasteur pipettes in chapter 8. **Liquid Handling**

EUROTUBO® Pipetting bulb

This one-handed design is the simplest safety pipette filler to use available.
Manufactured in natural orange rubber.
Approx. drawn capacity: 25 ml.
Single hand use, only two operating points. Evacuate via the automatic valve.
Standard model, accommodates all pipettes. Ability to clean inside of bulb by removing patented valve and rinsing out.

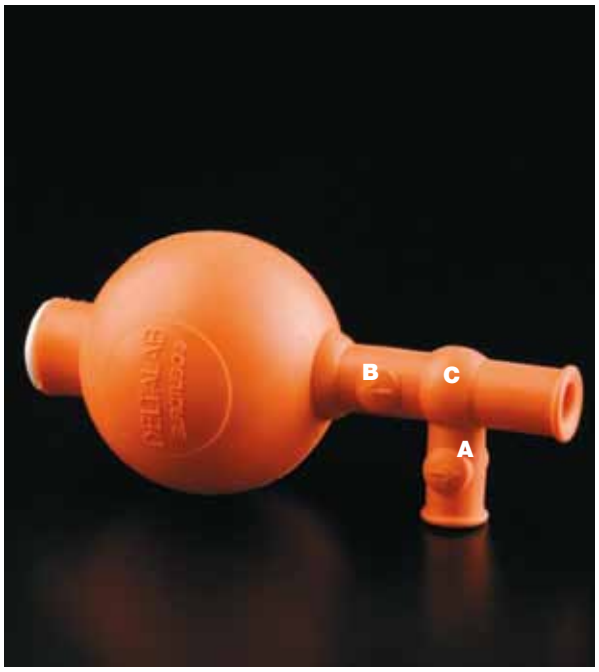
code	description	bag quantity	bag weight	bag volume
19200	pippeting bulb	1	0.05	0.004

1. Evacuate the air by pressing the bulb, as the drawing indicates.

2. Intake by pressing on point B ⓐ.

3. Drain the liquid by pressing on point A ⓐ.

4. Blow out the pipette by pressing as the drawing indicates (point C).



Pipetting bulb

Made of rubber.
Used to avoid mouth pipetting and contamination risk.
Can be opened, cleaned and **autoclaved**.
Ideal for Wintrobe and Westergren pipettes.

code	description	bag quantity	bag weight	bag volume
19201	red pippeting bulb	1	0.03	0.0001

Pipette pumps

Several models for various pipette volumes.
Designed for fast and efficient pipetting with simple, one handed operation.
Pipettes fit smoothly into collar.
Rotate the knurled thumb wheel on the side for precision filling or dispensing, and press the fast release lever for quick emptying.
Easy to use and easily disassembled for cleaning.
Sizes are colour coded.
Pipette pumps resist acids and alkalies.

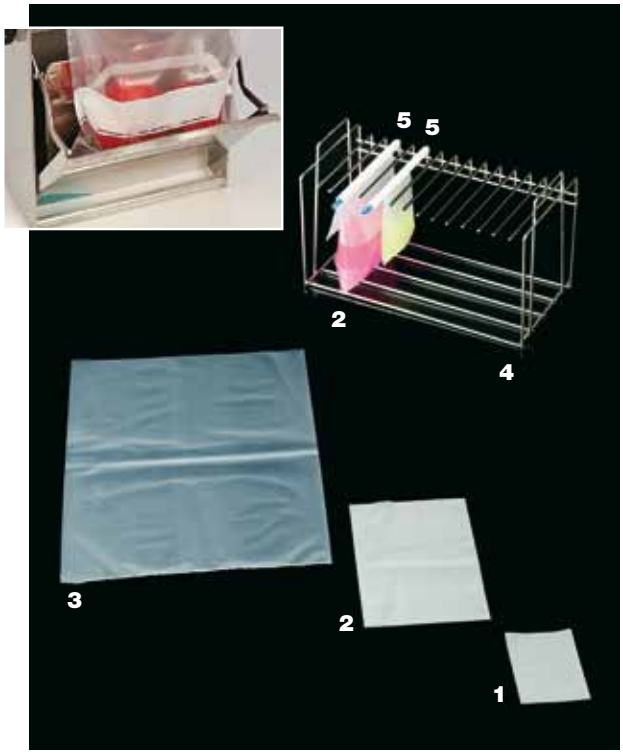
code	description	colour	bag quantity	bag weight	bag volume
W-100	up to 2 ml	blue	1	0.05	0.0002
W-110	up to 10 ml	green	1	0.05	0.0002
W-120	up to 25 ml	red	1	0.05	0.0002

Pipette pump support rack
See chapter 11. **Hygiene and safety.**

Sterile Whirl-Pak® blender bags with and without filter

Bags made of a low density polyethylene blend, resulting in an **extra-resistant and transparent bag.**
Leakproof closure with several metallic rounded sticks (see how to use it on figures on page 110).
Codes **200373**, **200374** and **200376** feature a **filter layer** of finely **perforated polyethylene**, to separate the liquid and solids. This allows the **easy pipetting of the sample**.
There are 6.45 holes per cm^2, each one measuring 330 microns diameter.
Bags with a **one-piece seam**, avoiding the possible risks of the loss of the corners bags.
They feature a write-on strip (excluding codes **200342** y **200343**).
Ethylene Oxyde sterilised. Made with materials suitables for alimentary use.

mod.	code	description	capacity ml	dimensions cm	tickness microns	case quantity	case weight	case volume
1	**200342**	standard bag	390	13 x 19	76	500	2.50	0.0170
1	**200343**	standard bag	720	15 x 23	102	500	3.88	0.0168
2	**200351**	bag with write-on strip	1,650	19 x 30	102	500	5.66	0.0182
3	**200373**	bag with filter and write-on strip	720	15 x 23	102	250	1.98	0.0166
3	**200376**	bag with filter and write-on strip	1,650	19 x 30	102	250	3.88	0.0180
3	**200374**	bag with filter and write-on strip	2,041	19 x 38	102	250	4.28	0.0170



Sterile bags for STOMACHER® blenders

Made of polyethylene. Thickness 7-8/100 mm. Ideal for mixing and blending bacterial samples or when collecting toxic substances from food, fabrics, etc.
Irradiation sterilised. Supplied in bags of 25 units. Code **15006** is a stainless steel rack for 14 bags. Side handles incorporated.
To close bags. May be used with the rack **15006**. Compounded by a blue tubular piece (230 mm) and a white clip (197 mm) which tightens the bag around the blue tube.
Code **15007** is a clip to adjust bags onto the rack.
Also available non sterile versions. Please ask for the minimum order quantity and delivery time. Add an “S” at the end of the code.

mod.	code	description	capacity ml	case quantity	case weight	case volume
1	**15001**	bag 100 x 155 mm	80	100 x 25	5.00	0.014
2	**15003**	bag 180 x 300 mm	400	20 x 25	4.06	0.010
3	**15004**	bag 380 x 580 mm	3,500	400	12.60	0.030
4	**15006**	rack 390 x 200 x 240 mm	-	1	1.62	0.039
5	**15007**	clips	-	10	0.15	0.001

Sterile homogeniser lateral filter bag

Filter bag suitable for PCR and small volumes, it can be used with very short pipette.
The unique and patented Pull-Up system allows to pinch the bag and pull up the filtered liquid for easy pipetting.
Nonwoven side filter having a porosity of 50 microns, rigid and transparent.
The filtration is performed during homogenization, it is not necessary to wait for the sedimentation of particles.
Compatible with any lab blender.
Made with materials suitables for alimentary use.

code	packaging	case quantity	case weight	case volume
15008	homogeniser lateral filter bag 400 ml	15x20	5.3	0.009

Sterile homogeniser full size filter bag

Bags incorporate a full size filter dividing them into two identical pouches. Insert the sample in one compartment. After sample process, solid particles remain in their original compartment while liquid has filtered into the second compartment, thus allowing a convenient liquid pipetting. Bag capacity: 2,000 ml.
Sterilised by **radiation**. Graduated.

code	packaging	case quantity	case weight	case volume
15005	195 x 300 mm in bags of 10 units	500	7.2	0.04

Tissue grinders-homogenisers

Borosilicate glass vessels and serrated plunger. Tips: head made of TEFLON, shaft made of stainless steel. Fully **autoclavable**.
The distance between the glass and the plunger is ± 200 µm.

Glass vessels:

code	volume ml	body Ø mm	height mm	quantity	weight	volume
196102	2	8	120	1	0.01	0.001
196105	5	12	132	1	0.01	0.001
196110	10	16	150	1	0.02	0.001
196115	15	19	155	1	0.03	0.001

Plunger-serrated tips:

code	for tube of mm	height mm	quantity	weight	volume
196302	2	230	1	0.06	0.001
196305	5	235	1	0.06	0.001
196310	10	270	1	0.06	0.001
196315	15	270	1	0.02	0.001

Surface sampling kits

Designed according to the international standard **ISO 18593**.
which is taken as reference on European Directives and Rules about **microbiology of food and animal feeding stuff, horizontal methods for sampling techniques from surfaces**.
The kit includes:
- A bottle containing 40 ml of sterile De-Neutralising solution
- A disposable sterile template, supplied in a flow pack bag
- A sponge or a swab, depending on the code

code	packaging	case quantity	case weight	case volume
200396.V	surface sampling kit with sponge	20	3.00	0.025
200397.V	surface sampling kit with a swab	20	3.00	0.025

Meat or turkey carcass sampling kit

Designed according to the international standard **ISO 17604**, which is taken as reference on European Directives and Rules about **microbiology of food and animal feeding stuff – carcass sampling for microbiological analysis**.
The kit includes:
- A bottle containing 25ml of sterile buffered peptone water
- A disposable sterile template, supplied in a flow pack bag
- A sponge or 2 swabs, depending on the code

code	packaging	case quantity	case weight	case volume
200393.V	carcass sampling kit with sponge	20	3.00	0.025
200394.V	carcass sampling kit with 2 swabs	20	3.00	0.025
200393P	template	20	0.75	0.0051

Sterile jars for water sampling

Transparent squared jars made of PET.
Wide mouth and grips at two sides, easing the sample collection. Red cap made of polypropylene with internal liner made of polexan with a label that performs as tamper evident. **Sterilised by radiation**.
Each bottle is labelled specifying description, code, lot, and expiry date.
Internal mouth diameter mm: 55
Jar weight (gr):
500 ml jar: 44 g - 1,000 ml jar: 65 g - 1,500 ml jar: 72 g

Available with or without thiosulfate sodium
With liquid sodium thiosulfate (24 mg/l): Ideal to analyze water meant for human consumption, swimming pools, and any other water where chlorine may modify the composition of the sample while being transported.
Empty, without thiosulfate: Ideal to sample water for physico-chemical analysis, as well as for other sampling requiring sterile bottles.

mod.	code	description	sterile	capacity ml	case quantity	case weight	case volume	cases per pallet
1	**282340**	jar **with thiosulfate**	**RADIATION**	500	44	2.68	0.036	40
2	**282341**	jar **with thiosulfate**	**RADIATION**	1,000	48	3.72	0.076	20
3	**282350**	jar **without thiosulfate**	**RADIATION**	500	44	2.68	0.036	40
4	**282351**	jar **without thiosulfate**	**RADIATION**	1,000	48	3.72	0.076	20

*Minimum ordering quantity: 1 pallet
We can supply any other concentration according to each country's standards.
We can also dose thiosulfate in other jars from our catalogue.
Optionally presented in individual bags if requested.

See industrial funnels on chapter 12. **Laboratory and industrial packaging**

Please ask for customized labes

Sterile bottles for water sampling

Rectangular body and cap made of polyethylene. The minor sides are gripped for a better handling.
The larger sides are flat for labelling. Tamper evident red cap with an internal joint. Hermetical closure.
Sterilised by radiation.
Each bottle is labelled specifying description, code, lot, and expiry date.
Dimensions:
500 ml bottle: 83 x 65 x 135 mm - 1,000 ml bottle: 83 x 65 x 235 mm.
Mouth diameter intern: 28 mm.
Unitary weight (empty bottle):
500 ml bottle: 40 g - 1,000 ml bottle: 61 g.
Available with or without thiosulfate sodium
With liquid sodium thiosulfate (24 mg/l): Ideal to analyse water meant for human consumption, swimming pools, and any other water where chlorine may modify the composition of the sample while being transported.
Empty, without thiosulfate: Ideal to sample water for physico-chemical analysis, as well as for other sampling requiring sterile bottles.

code	description	sterile	capacity ml	case quantity	case weight	case volume	cases per pallet
282320	bottle **with thiosulfate**	**RADIATION**	500	24	1.10	0.025	48
282321	bottle **with thiosulfate**	**RADIATION**	1,000	20	1.37	0.033	42
282323	bottle **with thiosulfate**	**RADIATION**	500	111	6.15	0.110	16
282323.BU	bottle **with thiosulfate**, individually wrapped	**RADIATION**	500	111	6.15	0.110	16
282324	bottle **with thiosulfate**	**RADIATION**	1,000	74	5.63	0.110	16
282324.BU	bottle **with thiosulfate**, individually wrapped	**RADIATION**	1,000	74	5.63	0.110	16
282330	bottle **without thiosulfate**	**RADIATION**	500	24	1.10	0.025	48
282331	bottle **without thiosulfate**	**RADIATION**	1,000	20	1.37	0.033	42
282333	bottle **without thiosulfate**	**RADIATION**	500	111	6.10	0.110	16
282334	bottle **without thiosulfate**	**RADIATION**	1,000	74	5.58	0.110	16

We can supply any other concentration according to each country's standards.
In 250 ml or 125 ml bottles if requested.
Optionally presented in individual bags if requested.

Please ask for customized labels

Sodium thiosulfate sterile bags Whirl-Pak

Specially designed for sampling chlorinated water: waste water, surface and irrigation water supplies, recreational waters, potable water.
Contains 3 tablets of 10 mg sodium thiosulfate.

As an added feature, these bags have a convenient. Write-on strip and markings for 100 ml and 300 ml measurements.
These markings help the technician to collect the correct amount of water as required by the testing procedure.
The write-on strip will accept virtually any writing instrument and minimizes ink smearing on the surface.

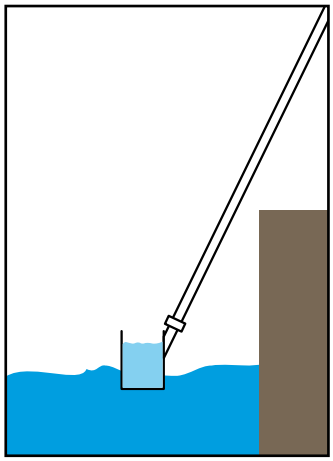
code	capacity ml	dimensions cm	case quantity	case weight	case volume
292604	for 300	11.5 x 23	100	0.54	0.0035

Long-handled dippers

Polypropylene cup and polyethylene handle.
For convenient sampling from tanks, vats, streams, ponds, lakes, etc. These dippers are light, easy to use and portable. The polypropylene cups have threaded fittings that screw onto the handle.
Two pouring spouts on the 500 ml dipper make it useful for left or right handed people to pour from either side.
The end of the handle has a hook for hanging.
Autoclavable container (up to **121°C**).

code	description	quantity	weight	volume
19575	91 cm handle, 500 ml container	1	0.30	0.009
19576	183 cm handle, 500 ml container	1	0.75	0.020
19577	container 500 ml (fits either handle)	1	0.30	0.005

Please ask the commercial department for other lengths.



container 121 °C

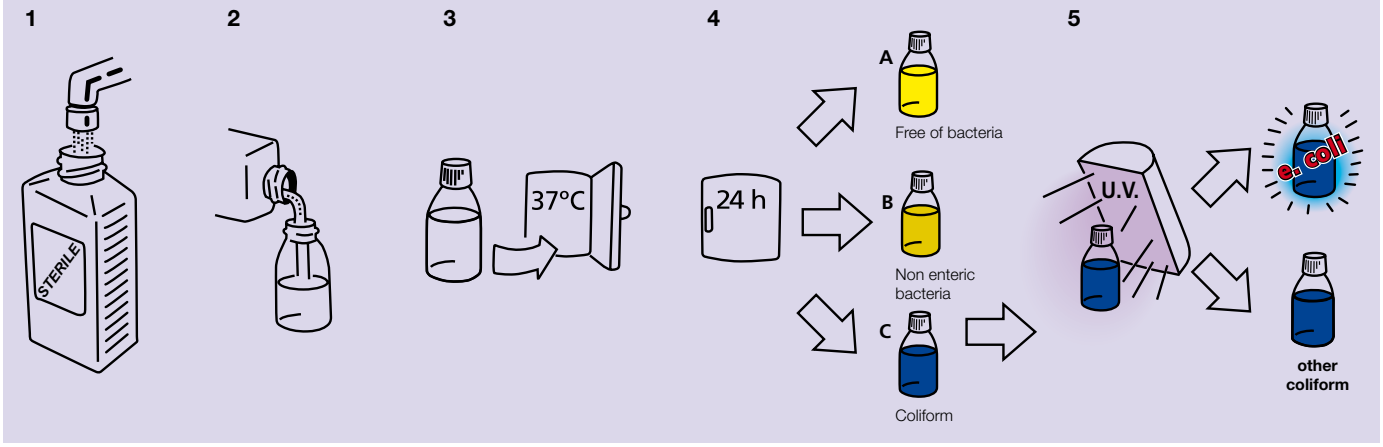
Water control: absence/presence of Coliforms (E. Coli)

125 ml bottle, made of PET, with white ribbed tamper evident cap made of PP. It contains dehydrated culture medium in order to detect the presence of coliforms in human consumption, industrial or leisure water (pools, etc.).
Sterile by radiation.
It allows the water testing directly on a bottle.
The culture medium is based on chromogenic substrates, which make possible the coliform reading; and complemented with fluorogenic substrates, which presumptively identify the presence of E. Coli.

Process:
1. A sample of water shall be taken in a sterile bottle, without additives, or with a neutralising (like thiosulfate) in case of chlorinated water.
2. A part of this sample (100 ml) is poured into the bottle containing the dehydrated culture medium; then shake gently until the medium is dissolved.
3. Incubate for 24 hours at 37 ºC.
4. After incubation, the colour will reveal the results:
   A Yellow: the sample is negative for non enteric bacteria, total coliforms and E. Coli.
   B Muddy yellow: the sample is positive for enteric bacteria (not coliforms).
   C Turquoise blue: the presence of total coliforms is confirmed.
5. To discard escherichia place the sample under a UV light in a dark environment; if the sample gets fluorescent it contains E.coli; if there is not fluorescency, then it is another coliform, not E. Coli.

Every case includes two boxes with ten bottles each.

code	description	case quantity	case weight	case volume
282300	absence/presence kit	2 x 10	0.84	0.012



Screw thread microtubes

Made of **autoclavable** polypropylene, they can be used at extreme temperatures from **–190 ºC to +121 ºC**. Two versions available: in transparent polypropylene, or opaque brown **(UV resistant**, designed to be used with light sensitive samples).
Certified RNAse, DNAse and pyrogen free. Tubes and caps can be centrifuged at **17,000 xg.** Caps are supplied separately, see below. Dimensions: 11 x 44 mm.

mod.	code	volume ml	skirt	case quantity	case weight	case volume
Transparent polypropylene						
1	**409110.1**	0.5	yes	1,000	1.46	0.010
2	**409110.2**	1.5	yes	1,000	1.45	0.010
3	**409110.3**	1.5	no	1,000	1.13	0.010
4	**409110.4**	2.0	yes	1,000	1.34	0.010
Brown polypropylene						
5	**409113.1**	0.5	yes	1,000	1.53	0.010
6	**409113.2**	1.5	yes	1,000	1.34	0.010
7	**409113.3**	1.5	no	1,000	1.34	0.009
8	**409113.4**	2	yes	1,000	1.34	0.009

Caps for screw thread microtubes

Made of polypropylene.
Caps are available either with an attachment loop or without loop.
Both models have a sealing O-ring (red) of silicone to ensure a positive leakproof seal.
For sample identification, colour coding inserts can be placed upon caps (made of polypropylene).
Cap dimensions: 13 x 8 mm.

mod.	code	description	case quantity	case weight	case volume
Transparent polypropylene					
1	**409007.N**	cap with loop	1,000	0.40	0.003
2	**409008.N**	cap without loop	1,000	0.40	0.003
Brown polypropylene					
3	**409007.M**	brown cap with loop	1,000	0.40	0.003
4	**409008.M**	brown cap without loop	1,000	0.40	0.003
Inserts					
5	**409111A**	blue insert	500	0.58	0.003
6	**409111AM**	yellow insert	500	0.58	0.003
7	**409111B**	white insert	500	0.58	0.003
8	**409111R**	red insert	500	0.58	0.003

Screw cap microtubes, with cap. Sterile

Tubes and caps in medical grade, transparent polypropylene.
The cap embodies a non-reactive ethylene-propylene o-ring.
Suitable for **autoclave, liquid nitrogen (gaz) and boiling processes**.
Perfect for long term storage.
Withstand temperatures from **–190 ºC**.
Centrifugation Resistance: **20,000 xg.**
DNAse, RNAse, DNA, and PCR inhibitors free.
Graduated models feature a frosted area for writing.
The non-graduated model incorporates an external grip for an easy handling.
Microtubes are supplied capped, in bags of 50 units.

code	description		graduation	case quantity	case weight	case volume
409115/4	0.5 ml skirted	**STERILE**	✗	50 x 50	5.90	0.030
409115/2	1.5 ml non skirted	**STERILE**	✓	50 x 50	5.90	0.030
409115/6	2 ml skirted	**STERILE**	✓	50 x 50	5.90	0.030
409115/3	2 ml non skirted	**STERILE**	✓	50 x 50	5.90	0.030

Screw thread microtubes

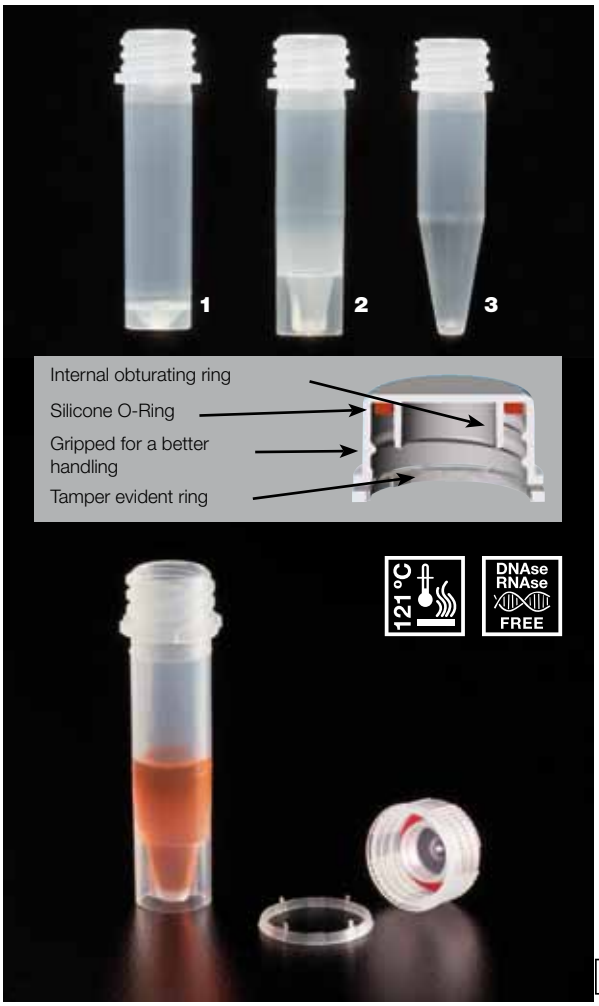
Made of transparent polypropylene.
Suitable for use in liquid nitrogen, **autoclave** and for boiling applications, and can be used at temperatures down to **–190 °C**.
Certified RNAse, DNAse and PCR inhibitors free.
Products ideal for long term sample storage.
Withstand centrifugation at **20,000 xg**. The codes **409111/4**, **409111/5** and **409111/6**, with external moulded slots for better handling with gloves.
Dimensions: 10.3 x 44.5 mm (except code **409111/2**: 10.3 x 43.6 mm).
Caps are supplied separately, see below.

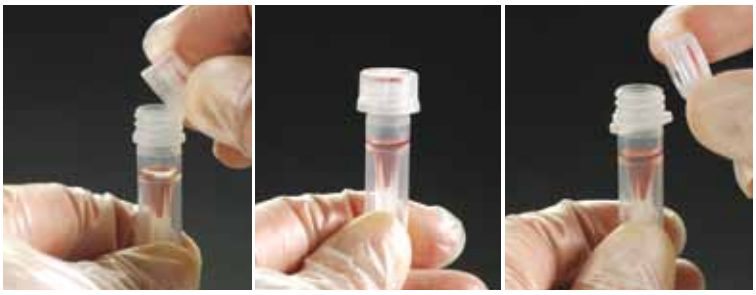
mod.	code	description	graduation	case quantity	case weight	case volume
1	**409111/4**	0.5 ml skirted	✗	500	0.70	0.002
2	**409111/2**	1.5 ml	✓	500	0.60	0.002
3	**409111/5**	1.5 ml skirted	✗	500	0.70	0.002
4	**409111/3**	2.0 ml	✓	500	0.70	0.002
5	**409111/6**	2.0 ml skirted	✗	500	0.70	0.002
6	**409111/7**	2.0 ml skirted	✓	500	0.70	0.002

Caps for screw thread microtubes

Made of medical grade polypropylene.
Feature an internal O-ring to ensure leakproof seal.
Dimensions 13.0 x 6.0 mm.
Certified RNAse, DNAse and PCR inhibitors free.

code	colour	case quantity	case weight	case volume
409112/0	natural	500	0.024	0.0001
409112/1	blue	500	0.024	0.0001
409112/2	green	500	0.024	0.0001
409112/4	red	500	0.024	0.0001
409112/6	yellow	500	0.024	0.0001





Screw cap until locking ring clicks over serrated tube neck.
Contents are now protected until cap is removed and tamper-evident ring is detached.

Screw thread tamper evident microtubes

Microtubes and caps are made of autoclavable ultra clear polypropylene. Ribbed cap with internal silicone O-ring for a positive **leakproof seal.** Super fast ¼ turn thread design. **Tamper evident** seal which notices if microtube has been opened.
Rnase, Dnase and Pyrogen free.
They can be used at extreme temperatures from **–196 °C** to **121 °C**.
Resistance to centrifugation: **17,000 xg.**
Microtube dimensions: 11 x 44 mm.
Cap dimensions (with tamper-evident ring): 15 x 9 mm.
Used on:

- Test of fertility and DNA testing
- Packaging of diagnostic kits and reagents
- Forensic laboratories

mod.	code	volume ml	case quantity	case weight	case volume
1	**409110.4T**	2	1,000	2.06	0.013
2	**409110.2T**	1.5	1,000	2.06	0.013
3	**409110.5T**	1.5	1,000	0.65	0.013

Human DNA free certified swabs, steriles

Human DNA free Certified. **Sterile**.
The swab is supplied in a polypropylene tube, which protects the sample up to the laboratory prior to its analysis. The stick of the swab is made of polystyrene while the head is produced with viscose, polyester or cotton according to the code. The tube is labeled indicating code, description, lot, expiry date and providing an identifying area to note down collection details (site, date, etc.). Moreover, the label seals the tube with the cap of the swab, acting like a tamper evident system.

	code	description	selling unit	case quantity	case weight	case volume
NEW	**300252DNA**	polystyrene + viscose	500	4 x 500	14.20	0.066
NEW	**300263DNA**	polystyrene + polyester (dacron® type)	500	4 x 500	14.20	0.066
NEW	**300261DNA**	polystyrene + cotton	500	4 x 500	14.20	0.066

Expiry date: 48 months from sterilisation date

0.2 ml Real Time PCR tubes

Tubes made of polypropylene, featuring attached hinged caps.
Flat caps are easily pierceable and offer optical quality, thus allowing their application in **Real Time PCR.**
Available in strips of 8 tubes (see code **4095.1NP** in the following page).
Certified **RNAse, DNAse and PCR inhibitors free.**

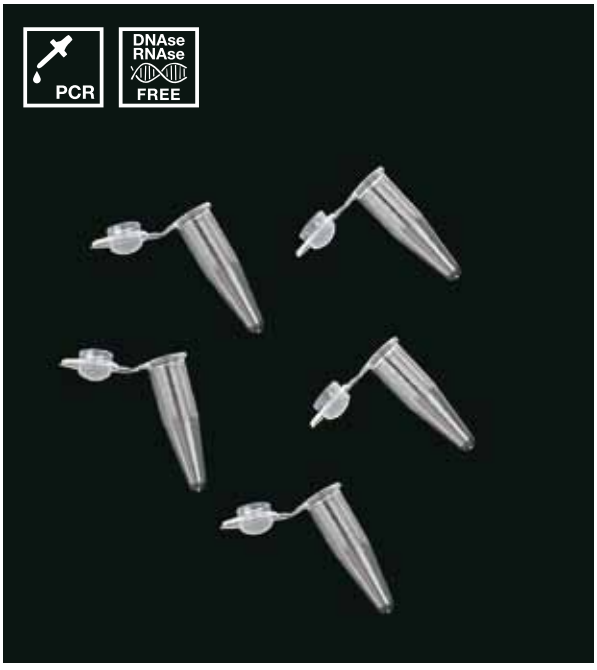
code	description	case quantity	case weight	case volume
4094.5N	PCR 0.2 ml QPCR tube	1,000	0.25	0.003

0.2 ml PCR tubes

Tubes made of polypropylene, featuring attached hinged caps. **Caps are flat and easily pierceable**.
See strips of these tubes on the following page (codes **4094.3N** and **4094.4N**).
Certified **RNAse, DNAse and PCR inhibitors free.**

code	colour	case quantity	case weight	case volume
4094.1N	natural	1,000	0.25	0.003
4094.1A	blue	1,000	0.25	0.003
4094.1R	red	1,000	0.25	0.003
4094.1V	green	1,000	0.25	0.003
4094.1AM	yellow	1,000	0.25	0.003

See minimum order and delivery time for other colors.



0.2 ml PCR tubes

Made of polypropylene.
Tubes with attached domed cap.
Certified **RNAse, DNAse and PCR inhibitors free.**

code	description	colour	case quantity	case weight	case volume
4095.9N	individual tube with cap	natural	1,000	0.25	0.003

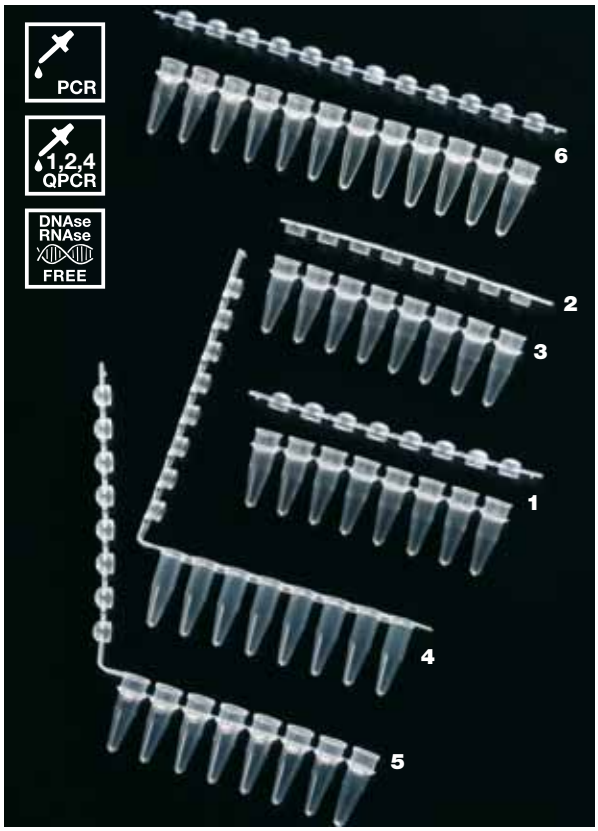
0.2 ml PCR tubes in strips

Made of natural colour polypropylene.
Certified RNAse, DNAse and pyrogen free.
Different models available:
- Strip of 8 or 12 tubes with its corresponding strip of 8 or 12 domed caps.
- Strip of 8 tubes with its attached hinged strip of domed caps.
- Strip of 8 tubes with its attached hinged strip of flat caps, suitable for **Real Time PCR.**
- Strip of 8 tubes.
- Strip of 8 flat caps, suitable for **Real Time PCR.**

Cap and tube strips allow easy handling and inventory of tubes and caps. Cap strips prevent cross-contamination from tube to tube.
Code **4095.7N** is also suitable for plates.

	code	description	case quantity	case weight	case volume
1	**4095.2N**	8 tube strip + 8 domed cap strip	125 strips	0.30	0.0035
2	**4095.7N**	strip of 8 flat caps	125 strips	0.20	0.0028
3	**4095.6N**	8 tube strip	125 strips	0.20	0.0036
4	**4095.1NP**	8 tube strip attached to 8 flat cap strips	125 strips	0.27	0.0036
5	**4095.1N**	8 tube strip attached to 8 domed cap strips	125 strips	0.27	0.0036
6	**4095.4N**	12 tube strip attached to 12 domed cap strips	80 strips	0.20	0.0028

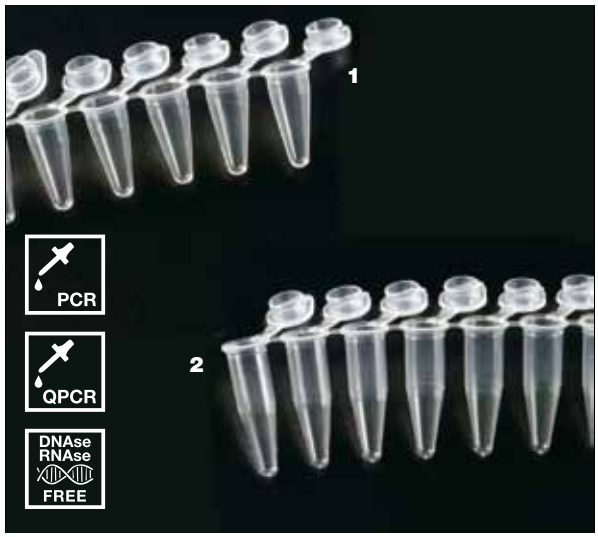
Ask for another colours.



0.2 ml PCR tubes in strips

Tubes made of polypropylene, featuring attached hinged caps.
Suitable for **Real Time PCR**.
See individual tubes on page 51 (**4094.1N**). Caps are flat and easily pierceable.
Certified RNAse, DNAse and pyrogen free.
In bags of 10 strips.
Available in standard height (code **4094.3N**) and low profile (code **4094.4N**) that minimizes the effects of condensation and it allows working with small samples even less than 20 µl.

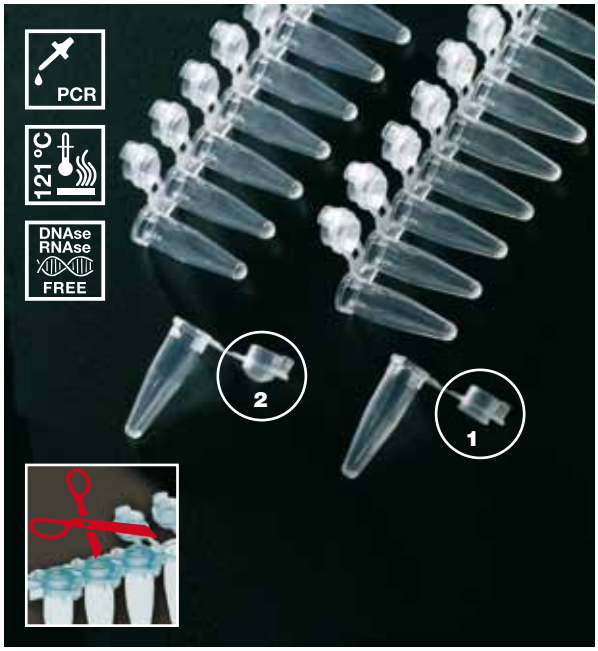
	code	description	case quantity	case weight	case volume
1	**4094.3N**	strip of 8 tubes and 8 attached caps	120 strips	0.27	0.0036
2	**4094.4N**	strip of 8 tubes and 8 attached caps **low profile**	120 strips	0.20	0.0028



0.2 ml PCR tubes in strips

Made of **autoclavable** polypropylene.
Certified RNAse, DNAse and pyrogen free.
The strip includes 8 integral 0.2 tubes with ultra thin sidewalls and bottoms with individually attached caps.
Available with either **flat (needle pierceable) or dome-topped individually** attached hinged caps.
Every cap embodies a shield in order to prevent contamination when being opened.
While easily opened and closed with one hand, their positive sealing will fully protect the contents from evaporation during the whole thermal cycle. These strips can be cut to any length while each tube has its own attached cap.

	code	cap	colour	case quantity	case weight	case volume
1	**4096.2N**	flat cap	natural	125 strips	0,40	0,055
2	**4096.3N**	domed cap	natural	125 strips	0,40	0,055



Real Time PCR

Polimerase Chain Reaction is one of the most common techniques in every lab where Molecular Biology is being used. Its applications comprise **Diagnostics, Genetic and Prenatal testing, Tissue Typing, Forensics, Pharmacological evaluation,** among others**.**

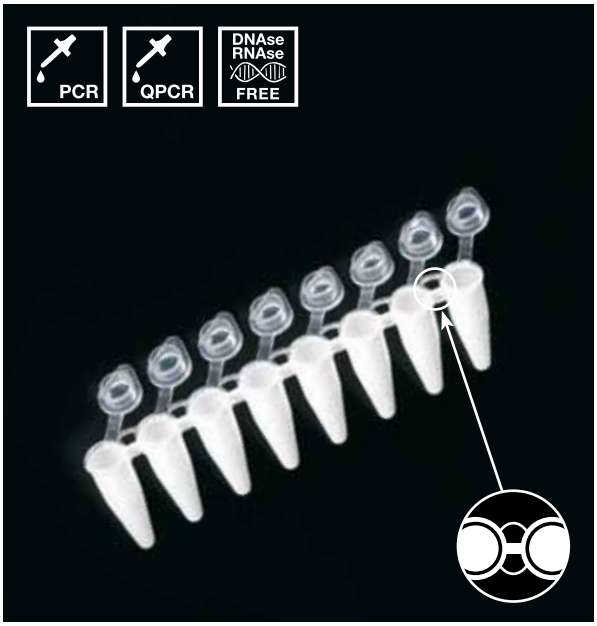
One of the **most useful PCR techniques** is the **Real Time PCR,** also known as **Quantitative PCR (QPCR). Its main advantage in front of standard PCR is that it saves time as the quantification is being held during DNA amplification.** While standard PCR needs a quantifying process after DNA amplification, **QPCR gives results in real time.**

PCR standard consumables are mainly made of transparent polypropylene. After some years of experience, laboratory technicians have found that **crosstalking among transparent wells may affect the real time quantification**. **Opaque white wells and tubes** have proved to avoid this well-to-well crosstalking, thus **ensuring an exact** and **reliable quantification**.

Opace wells also allows luminosity absorption.

The following pages include the newest innovations in this brand new area; like **bi-mould technologies**, which allow the manufacture of an opaque tube attached to an optically clear cap.

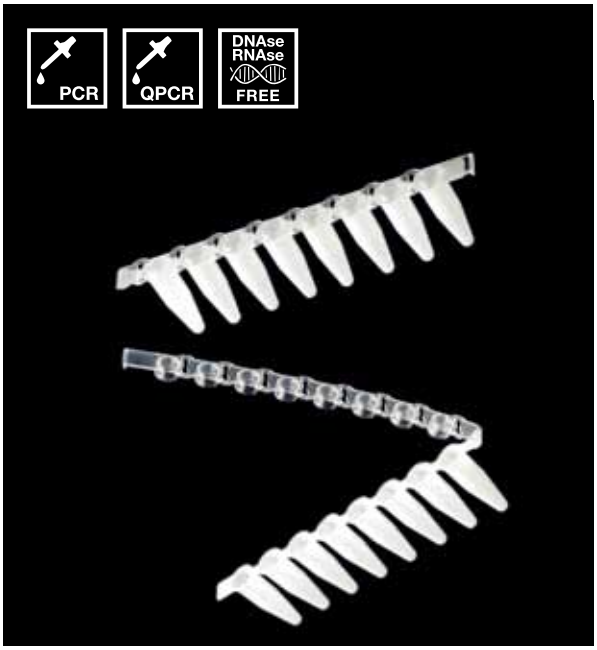
White well technology is available in both strips of tubes or also 96 well plates.



0.2 ml, Real Time PCR tubes in strips

Tubes made of polypropylene.
Strip of 8 tubes, each one featuring an attached flat cap.
Strips are manufactured by biomaterial molding, so the tubes are made of opaque white PP, while caps are compounded of transparent, optically clear PP.
Opaque white tubes perform the highest performance in **Real Time PCR**, as they avoid crosstalking between wells.
Specially conceived for **Real Time PCR**. Caps are easily pierceable. **Certified RNAse, DNAse and PCR inhibitors free**.
In bags of 10 strips.

code	description	case quantity	case weight	case volume
4094.5BP	strip of 8 white 0.2 ml QPCR tubes and 8 attached caps	120	0.26	0.004



0.2 ml, Real Time PCR tubes in strips

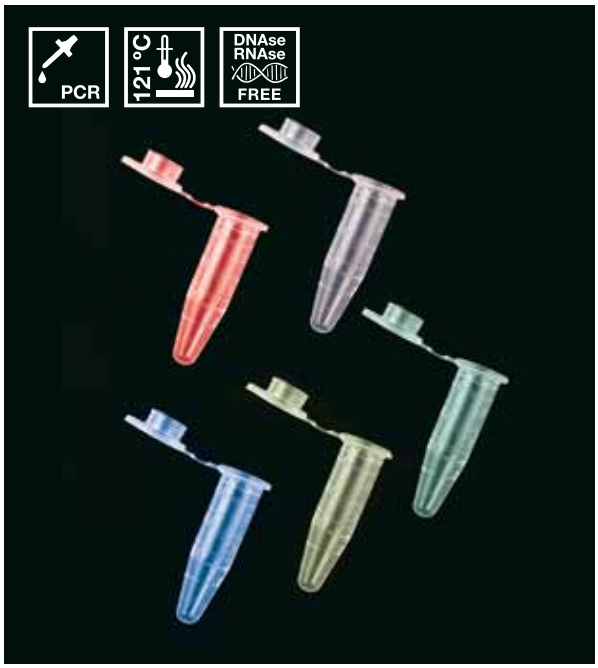
Tubes made of polypropylene.
Strip of 8 tubes, featuring an attached strip of 8 flat caps. Strips are manufactured by biomaterial molding, so the tubes are made of opaque white PP, while caps are compounded of transparent, optically clear PP. Opaque white tubes perform the highest performance in Real Time PCR, as they avoid crosstalking between wells. Specially conceived for **Real Time PCR.**
Caps are easily pierceable.
Certified RNAse, DNAse and pyrogen free.

code	description	case quantity	case weight	case volume
4095.1BP	strip of 8 white 0.2 ml QPCR tubes and 8 caps	125	0.23	0.004

Graduated 0.5 ml PCR tubes

Made of **autoclavable** polypropylene.
Certified RNAse, DNAse and pyrogen free.
Attached hinged caps are flat and easily pierceable.
Tubes are easily opened and closed with one hand.
Tubes have moulded-in graduations in 0.1 ml increments from 0.1 up to 0.6 ml, and a frosted panel on their side for writing or labelling.

code	colour	case quantity	case weight	case volume
4094.2N	natural	1,000	0.38	0.0046
4094.2V	green	1,000	0.38	0.0046
4094.2AM	yellow	1,000	0.38	0.0046
4094.2A	blue	1,000	0.38	0.0046
4094.2R	red	1,000	0.38	0.0046



Graduated 0.5 ml PCR tubes

Same features as the above tubes, but with a domed cap.

code	colour	case quantity	case weight	case volume
4095.5N	natural	1,000	0.46	0.0050

384 wells plate skirted

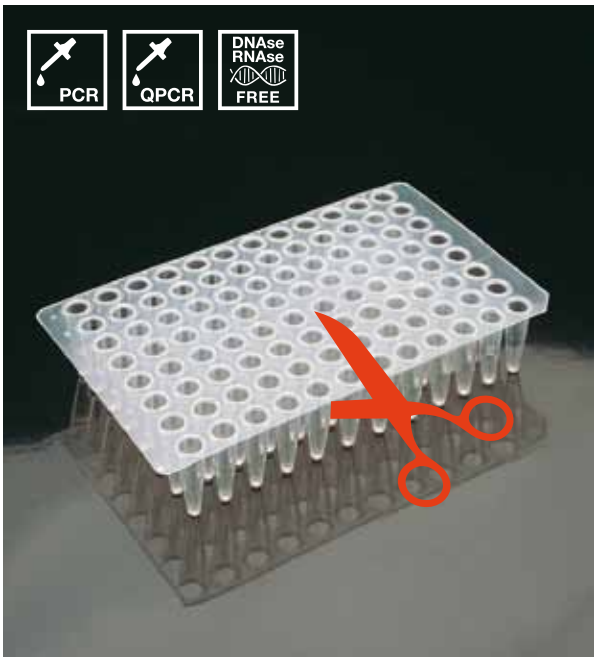
Made of transparent polypropylene. 384 wells plate.
Each well has a capacity of 50 µl.
A low rim around the top of each well helps to prevent accidental cross-contamination
All wells are thin walled for an excellent thermal transfer.
Orientation cut is at position A 24 (upper right).
A black printed alphanumeric grid helps sample identification.
RNAse, DNAse, DNA and PCR inhibitors free.
Suitable for PCR and **real time PCR (QPCR)**.
Dimensions according to the **SBS** standard.

code	description	case quantity	case weight	case volume
900384	384 PCR well plate	10 x 10	3.20	0.026

Minimun order quantity: 10

PCR Plates – COMPATIBILITY CHART Well Shape		900111 and 900111B	900110 unskirted	900122 semi skirt	900112 semi-skirt	900113B semi skirt	900123 skirted	900384 skirted	9000098 unskirted	900095 white, skirted 900093 black, skirted
Standard well. (Overall height approx. 21 mm, max. capacity approx. 350 µl)		●		●					●	
Low profile well. (Overall height approx. 16 mm, max. capacity approx. 200 µl)			●		●	●	●	50 µl		●
Manufacturer	**Model**									
Apollo Brand										
	ATC401	●							●	●
Applied Biosystems										
Thermal Cyclers	2700	●		●				●	●	
	9600	●		●					●	
	9700	●		●				●	●	
	9800 "Fast"				●					
	Veriti 0.1 ml				●					
	Veriti 384							●		
"Real Time" Cyclers										
	5700	●		●						
	PRISM 7000	●		●					●	
	7300	●							●	
	7500	●							●	
	7500 "Fast"				●					
	7700	●		●					●	
	Step One plus				●					
Sequencers	PRISM 310	●		●						
	PRISM 3100	●		●						
	3130 (XL)	●		●						
	3700	●		●				●		
	PRISM 3730 (XL)	●		●						
Amersham										
Sequencers	MegaBace 500						●			●
	MegaBace 1000						●			
	MegaBace 4000							●		
Beckman										
Sequencers	CEQ	●								
Biometra										
Thermal Cyclers	Uno	●	●	●			●		●	●
	Uno II	●	●	●				●	●	
	T1 Thermal Cycler	●	●	●			●	●	●	●
	Tgradient	●	●	●			●		●	●
	Trobot	●	●	●			●	●	●	●
Bio-Rad/MJ Research										
Thermal Cyclers	Gene Cycler	●								
	PTC-100	●	●	●			●	●	●	●
	PTC-200	●	●	●			●	●	●	●
	PTC-220/221	●	●				●		●	●
	PTC-225 Tetrad	●	●	●			●	●	●	●
	Dyad/Dyad Disciple	●	●	●			●	●		
	iCycler	●		●			●		●	
	MyCycler	●		●					●	
	Mini Gradient	●	●							
	Personal	●		●						
	DNA Engine family	●	●	●			●	●		
	C1000/S1000	●	●	●			●	●	●	●
"Real Time" Cyclers	Opticon/Opticon2	●	●				●			
	Chromo-4		●				●			●
	iCycler	●		●			●	●		
	MyiQ	●		●			●			
	iQ5	●		●			●			
	CFX96						●			
	CFX384							●		
Sequencers	BaseStation						●			●

PCR Plates – COMPATIBILITY CHART Well Shape		900111 and 900111B	900110 unskirted	900122 semi skirt	900112 semi-skirt	900113B semi skirt	900123 skirted	900384 skirted	9000098 unskirted	900095 white, skirted 900093 black, skirted
Standard well. (Overall height approx. 21 mm, max. capacity approx. 350 µl)		●		●					●	
Low profile well. (Overall height approx. 16 mm, max. capacity approx. 200 µl)			●		●	●	●	50 µl		●
Manufacturer	**Model**									
Corbett Research	PalmCycler 96		●	●			●		●	●
(Qiagen)	PalmCycler 384							●		
Eppendorf	Mastercycler	●	●	●			●			
	Mastercycler Gradient	●							●	●
	Mastercycler ep	●	●	●			●			
	Mastercycler M384							●		
"Real time" Thermal Cyclers	Mastercycler ep Realplex			●			●		●	●
Ericom	Power Block I	●	●							
	Deltacycler I	●	●	●					●	
	Deltacycler II	●	●						●	
	Single Block	●	●	●					●	
	Twin Block	●	●	●					●	
Esco	Swift	●		●				●		
Flexi	Gene	●		●			●	●		
	Genius	●		●			●			
G-Storm	GS1	●	●	●						
	GS4	●	●	●						
	GSX	●	●	●						
	GSXs	●	●	●						
MWG	Primus 96	●	●	●			●		●	●
	Primus 384							●		
	TheQ Lifecycler	●	●				●		●	●
Roche										
"Real Time" Cyclers	LightCycler 480					●				
Stratagene	Robocycler 96	●		●					●	●
	Gradient Cycler	●		●			●		●	●
	Robocycler Gradient	●	●	●			●			
"Real Time" Cyclers	Mx4000 and Mx3000	●	●						●	
	Mx3005P™	●		●			●		●	
TaKaRa	TP240						●			
	TP3000	●	●	●			●		●	●
Techne	Touchgene	●	●	●					●	●
	Cyclogene	●	●	●					●	●
	Genius	●	●	●					●	●
	Genius Quad	●	●	●					●	●
	Genius (TC412)	●	●	●			●		●	●
	Flexigene	●	●	●			●	●	●	●
	Touchgene X	●	●	●			●	●		
	Touchgene Gradient ITC512)	●	●	●			●	●	●	●
"Real Time" Cyclers	Quantica		●				●			●
Thermo Hybaid	PCR Sprint	●	●	●			●			
	MBS Satelite System	●	●	●			●	●	●	●
	Px2 and PxE	●	●	●			●	●	●	●
	PCR Express and Omni-E	●	●	●			●	●	●	●
	Touchdown	●	●	●			●	●	●	●
	Omnigene	●	●	●			●	●	●	●
Transgenomic										
Sequencers	WAVE System						●			●



96-well flexible PCR plate

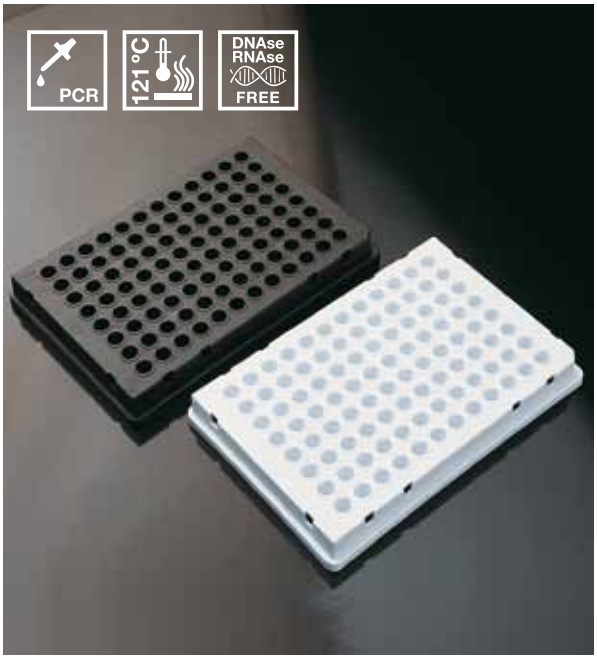
Made of **autoclavable** polypropylene.
It is suitable for both real time and standard PCR thermocyclers.
This 96-well PCR plate is thin-walled for rapid thermal transfer. Flexible, the plate could be easily cut into sections of 24, 32 or 48 tubes.
An alphanumeric grid helps sample identification, and to facilitate orientation, the bottom right corner of the plate is cut away.
Dimensions: 120 x 73 x 20 mm.
Certified RNAse and DNAse free.
Dimensions according to the **SBS** standard

code	colour	case quantity	case weight	case volume
900098	natural	10	0.21	0.0024

96-well low profile skirted PCR plate

Made of polypropylene. Each “low profile” well has a capacity of 200 µl.
A low rim around the top of each well helps to prevent accidental cross-contamination and makes easy the sealing with film.
All wells are thin walled for an excellent thermal transfer.
This plate has a skirt approximately 15 mm high that can be filled using automatic fluid handling systems or standard multichannel pipettors.
A black printed alphanumeric grid helps sample identification.
Orientation cut is at position A 12 (upper right).
RNAse, DNAse, DNA and PCR inhibitors free.
Suitable for PCR and real time **PCR (QPCR)**.
Dimensions according to the **SBS** standard.

code	colour	case quantity	case weight	case volume
900123	natural	10 x 10	2.96	0.030



Opaque skirted 96 well PCR plate

Made of **autoclavable** polypropylene.
Alphanumeric identification.
The skirt around the plate provides a labelling area.
Conical-bottomed wells.
The plate can be handled by robotic equipment and is ideal with automated pipetting systems.
To facilitate orientation, the bottom right corner of the plate is cut away.
Well dimensions: 5.5 mm. Well depth: 14 mm.
Code **900093**: Black plate for fluorescent PCR.
Code **900095**: White plate for luminescence (optical absorption) PCR.
Dimensions: 126 x 84 x 15 mm.
Certified RNAse and DNAse free.

code	description	case quantity	case weight	case volume
900093	96 well black plate	5 x10	1.34	0.010
900095	96 well white plate	5 x 10	1.34	0.010

96 well standard plate

Made of transparent polypropylene.
96 wells standard plate with a capacity of 350 µl each well.
A low rim around the top of each well helps to prevent accidental cross-contamination and makes easy the sealing with film.
All wells are thin walled for an excellent thermal transfer.
A black printed alphanumeric grid helps sample identification.
Orientation cut is at position A 12 (upper right).
RNAse, DNAse, DNA and PCR inhibitors free.
Suitable for PCR and real time **PCR (QPCR)**.
Dimensions according to the **SBS** standard.

code	colour	case quantity	case weight	case volume
900111	natural	10 x 10	2.72	0.030

96-well low profile PCR plate

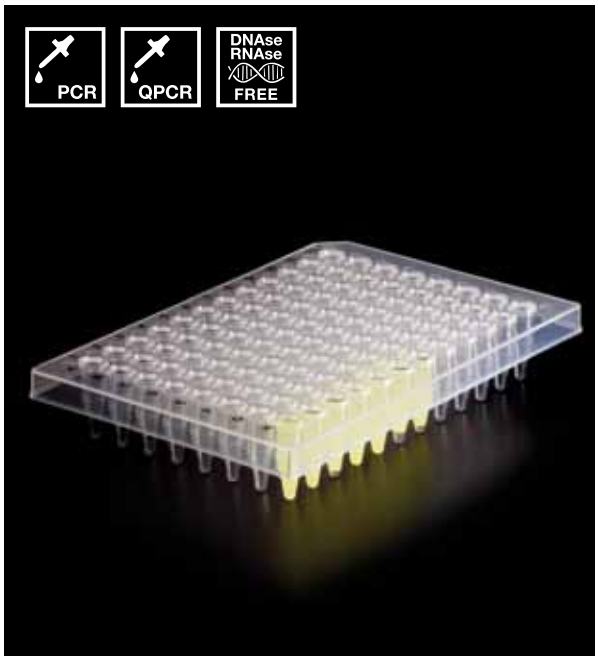
Made of transparent polypropylene.
Low profile well (15 mm high).
Perfect to work with samples of 100 µl or even less.
A low rim around the top of each well helps to prevent accidental cross-contamination.
The orientation cut is at position H 12 (lower right).
A printed alphanumeric grid helps sample identification.
DNAse, RNAse, DNA and PCR inhibitors free.
It is suitable for both standard or **Real Time PCR**.
Dimensions according to the **SBS** standard.

code	description	case quantity	case weight	case volume
900110	low profile PCR plate	5 x 20	1.9	0.018

96 well semi-skirt plate

Made of transparent polypropylene.
This plate has a semi skirt ±7.5 mm high.
Each well has a capacity of 200 µl and embodies a low rim around its top which prevents accidental cross-contamination and it makes easy the sealing with foils.
Orientation cut is at position A 12 (upper right).
Alphanumeric identification printed in black.
DNAse, RNAse, DNA and PCR inhibitors free.
Dimensions according to the **SBS** standard.

code	description	case quantity	case weight	case volume
900122	semi-skirt PCR plate	10	0.32	0.0027



96 wells white standard plate

Made of white polypropylene. 96 wells standard plate.
Each well has a capacity of 350 µl.
A low rim around the top of each well helps to prevent accidental cross-contamination and makes easy the sealing with film.
All wells are thin walled for an excellent thermal transfer.
Its flexible design allows the plate to be easily cut into sections of 24, 32 or 48 tubes.
Orientation cut is at position A 12 (upper right).
A black printed alphanumeric grid helps sample identification.
RNAse, DNAse, DNA and PCR inhibitors free.
Suitable for PCR and **real time PCR (QPCR)**.
Dimensions according to the SBS standard.

code	description	case quantity	case weight	case volume
900111B	white PCR plate	10 x10	2.96	0.030

96 wells low profile, semi-skirted white plate

Specially designed for Roche thermocycler.
Made of white polypropylene. Semi-skirt “low profile” 96 well. Each well has a capacity of 200 µl.
A low rim around the top of each well helps to prevent accidental cross-contamination and makes easy the sealing with film.
Orientation cut is at position H 12 (bottom right).
A black printed alphanumeric grid helps sample identification.
RNAse, DNAse, DNA and PCR inhibitors free.
Suitable for PCR and **real time PCR**.
Dimensions according to the **SBS** standard.

code	description	case quantity	case weight	case volume
900113B	semi-skirt PCR plate	10 x 10	2.96	0.030

96 well, low profile, semi-skirted plate

Specially designed for ABI “Fast” thermocycler.
Made of transparent polypropylene.
Semi-skirt “low profile” 96 well.
Each well has a capacity of 200 µl.
A low rim around the top of each well helps to prevent accidental cross-contamination.
Orientation cut is at position A 1 (upper left).
A black printed alphanumeric grid helps sample identification.
RNAse, DNAse, DNA and PCR inhibitors free.
Suitable for PCR and real time **PCR (QPCR).**
Dimensions according to the **SBS** standard.

code	description	case quantity	case weight	case volume
900112	semi-skirt PCR plate	10 x 10	2.96	0.030

PCR sealing mat

Manufactured from a non reactive rubber, this PCR sealing mat ensures a secure, leak free seal during the PCR cycling process.
It is designed to seal **96 well PCR plates**, but may also be cut to fit 24/32/48 well plates.
The mat is marked “this side up” for a proper positioning into the plate (sharp cone side up).
This sealing mat may be sterilised in an **autoclave** or cleaned by immersion in a bleach solution.
The PCR sealing mat can be re-used as often as required.
DNAse, RNAse, DNA and PCR inhibitors free.

code	description	case quantity	case weight	case volume
900305	PCR sealing mat	10 x 5	1.20	0.012

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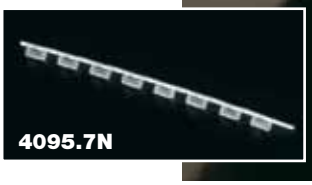


Adhesive sealing film

Sealing film for use with microplates, multiwell plates and microtiter plates.
Advantages:
1. Minimises the risk of contamination or reagent spillage during ELISA or PCR processes.
2. Minimises the risk of contamination from tube to tube and from plate to plate.
3. Prevents sample evaporation.

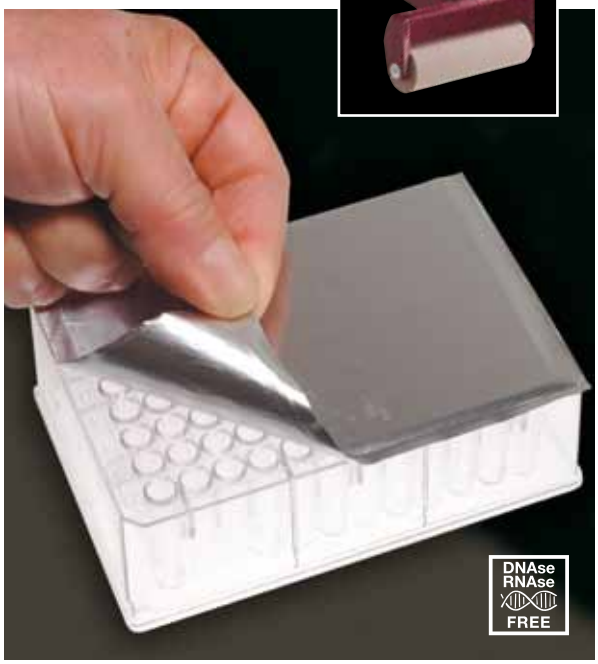
A 5 mm wide strip (opaque white) at the lateral edges of the film helps pull the film from its protective paper and prevents it sticking onto fingers. The film is thermostable and functional from **–70 °C to 95 °C** at 75% humidity.
RNAse and DNAse free. DMSO resistant.
We recomend to use the “roller” **900330** to ensure a perfect seal.

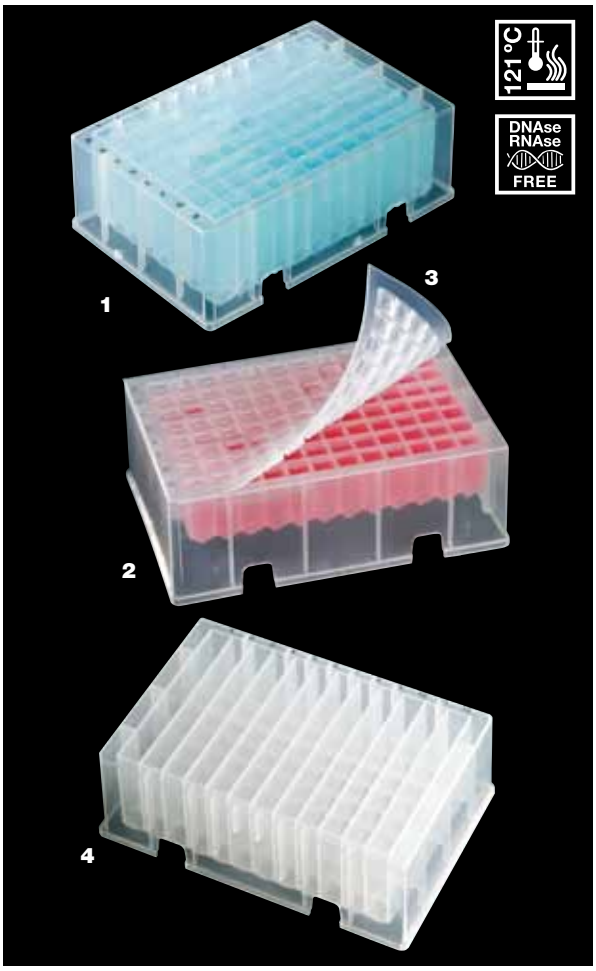
code	description	case quantity	case weight	case volume
900300	adhesive film	1 x 100	0.23	0.001
900330	sealing roller	1	0.014	0.0001

Aluminium sealing foil

This type of material is ideal for manual sealing during PCR work, microtiter plates or manipulation and file plates.
For high throughput applications from **–86 °C to 95 °C**.
Adhesive backing.
Pierceable with a pipette tip for easy access to sample.
DMSO resistant.
It is recommended to use the “roller” code **900330** for ensuring a perfect sealing, eliminating the danger of evaporation.
RNAsa, DNAsa and DNA free.

code	description	case quantity	case weight	case volume
900320	aluminium foil	1 x 100	0.28	0.001
900330	sealing roller	1	0.014	0.0001





Deep well plate (96 square wells or 12 rectangular channels)

Made of medical grade polypropylene.
A printed alphanumeric grid helps sample identification, and to facilitate orientation the bottom left corner of the plate is cut away.
Conical bottom wells.
Widely used for liquid handling and storage, whether with manual pipetting or robotic handling.
Withstand temperatures from **–90 °C to 121 °C** (**Autoclave**).
Dimensions according to SBS.
Certified free from detectable RNase, DNase, DNA and PCR inhibitors.
Codes **900195** and **900196** are supplied in 2 bags of 5 units each.
Code **900309** is a sealing mat manufactured from autoclavable silicone. Exclusive use with the square well plates (**900195** and **900196**).
Pierceable so the sample can be aspirated without removing the mat.
Supplied in a bag of 5 units.
Code **900197** proves to be extremely convenient as a reservoir thanks to its 12 high volume channels. Supplied in a bag of 5 units.

mod.	code	description	case quantity	case weight	case volume
1	**900195**	96 well plate 2.2 ml	2 x 5	1.18	0.009
2	**900196**	96 well plate 1.1 ml	2 x 5	0.95	0.007
3	**900309**	sealing mat for 96 squared wells	1 x 5	0.16	0.001
4	**900197**	12 channel plate 22 ml	1 x 5	0.45	0.005

96 deep well plate (96 round wells)

Made of medical grade polypropylene, it is comprised of 96 round bottom wells, each one of 1.2 ml capacity. Printed alphanumeric grid helps sample identification, and to facilitate orientation the bottom right corner of the plate is cut away.
Widely used for liquid handling and storage, whether with manual pipetting or robotic handling.
It withstands temperatures from **–90 °C to 121 °C** (**autoclave**).
Dimensions according to SBS.
Certified free from detectable RNase, DNase, DNA and PCR inhibitors.
It can be sealed with the plastic sealing film **900300** or the pierceable aluminum foil **900320**.

code	description	case quantity	case weight	case volume
900155	96 well plate 1.2 ml	10	1.41	0.009

96 deep well plate (square well, round bottom)

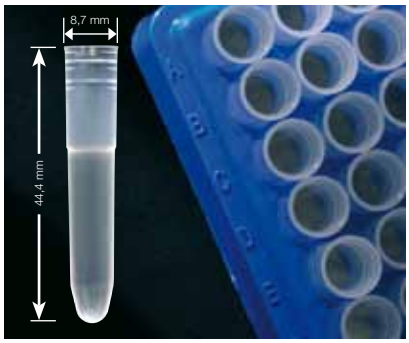
Made of polypropylene. The 2.1 ml well capacity (2.0 when capped) plate is used mainly for compound storage and enzyme assays. An alphanumeric grid helps sample identification, and to facilitate orientation the bottom right corner of the plate is cut away.
DMSO resistant. Can be centrifuged up to **6000 xg**.
Withstand temperatures up to **–150 °C**. **Autoclavable**.
Each well measures 8.3 x 8.3 mm.
Plate dimensions: 41.6 mm high x 127.8 mm long x 85.5 mm wide.
We recommend to protect the samples with the sealing mat code **900306** (DMSO resistant).

code	description	case quantity	case weight	case volume
900170	96 deep well plate, natural colour	4	0.47	0.002
900306	sealing mat	24	0.15	0.002

Sample storage system

96 round bottom tubes, supplied in twelve strips of eight tubes each, held in a rack with lid. Rack, lid, tubes and caps are made of **autoclavable** polypropylene, manufactured with the SBS standard footprint. Compatible with all robotic applications and multichannel pipetting systems. Alphanumeric numbered wells, indelibly printed in black, allowing identification in short light conditions. **DNAse, RNAse, DNA and PCR inhibitors free**.
Used for serial dilutions, mixing, storage and harvesting of cells, cell growth for cell culture assays and DNA screening, and as an ideal long-term storage system.
Caps are sold separately in strips of eight units; every cap has a tag to make an easy opening and closing.
Tube dimensions (height): 8 x 44 mm
Rack dimensions (with lid): 128 x 86 x 48 mm

code	description	case quantity	case weight	case volume
409009	rack with 96 tubes (8 x 12)	10	1.63	0.0140
409010	strips of 8 tubes each	125 strips	0.27	0.0073
409011	strips of 8 caps each	125 strips	0.11	0.0012
409012	loose tubes	1,000	0.63	0.0073



Sample storage system

Compact sample storing system. It consists on a blue rack with a translucent lid, holding 96 loose round bottom tubes (1,2 ml) arranged in 8 x 12.
Autoclavable and stackable, it resists up to **–100 ºC**, and embodies a moulded alphanumeric identification.
Rack, lid and tubes made of polypropylene. Caps made of low density polyethylene.
Caps are sold apart in strips of eight units; every cap has a tag to make an easy opening and closing.
Tube dimensions (height, closed): 8,7 x 45 mm.
Rack dimensions (with lid): 118 x 82 x 50 mm.
DNAse, RNAse free.

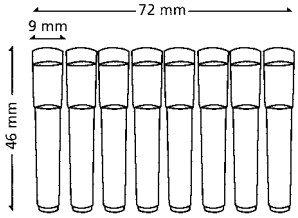
code	description	case quantity	case weight	case volume
409008	rack with 96 tubes (8 x 12)	10	1.24	0.0100
409005	strips of 8 caps each	120 strips	0.01	0.0001
409008.1	tubes in bulk	1,000	1.00	0.0500

Sample storage system

It consists on a white rack and a transparent lid, with 96 tubes (12 x 8) 1.2 ml (capped, 1.1 ml).
Tubes and rack are manufactured in polypropylene, being autoclavable.
Caps in non **autoclavable** polyethylene.
Caps are acquired apart, in strips on eight units.
It is ideal to work with robots and multichannel pipetting systems, as well as for sample transport, storage, or freezing (it can withstand up to **–80 °C**).
It stands up the majority of chemical agents.
Both lid and rack embody an alphanumeric identification.
The top left edge of the lid is cut for an exact orientation.
Tube dimensions (capped): 9 x 48 mm.
Rack dimensions (with lid): 126 x 81 x 53 mm.

According to SBS standard.

code	description	case quantity	case weight	case volume
409004	rack with 96 tubes (8 x 12)	10	1.81	0.0080
408002	tubes of 8 caps each	120 strips	0.60	0.0040
408005	strips of 8 caps each	120 strips	0.01	0.0001
408003	loose tubes	5 x 960	0.80	0.0200



Storage rack with 2 ml tubes

Compatible with most robotic Workstation, this polypropylene storage rack can be used with most cell harvesters and leading 8 – & 12 – chanel pipettors.
It contains 96 removable polypropylene square tubes in a 8 x 12 configuration, each having a 2.1 ml capacity.
Although the tubes are square, the bottom is round to facilitate emptying.
Tubes and rack are **autoclavable** and they are ideal for storage of blood and other biological samples at temperatures from **–30°C up to 70°C**.

Racks are stackable to save storage space.
According to SBS standard.

code	description	case quantity	case weight	case volume
418003	96 well storage rack with tubes	10	1.81	0.008

100% Traceability

Our blood collection tubes are individually identified with its code, LOT number and expiry date, so the traceability from its manufacture to the final consumer is guaranteed.
Raw materials traceability.
Process traceability.
Final product traceability.
We manufacture our blood collection tubes by following:
Directive **98/79/EC** "In vitro" diagnostic medical devices.
- **ISO 6710** Single use containers for blood collection
- **UNE-EN ISO 14971** for the Risks Management of Sanitary Products
- **UNE-EN 980** for Labelling and Marking
- **UNE-EN ISO 13485**, medical devices - quality management systems

Expiry date our tubes, anticoagulants and other

- Serum tubes (granules and gel): ..... 24 months
- Serotub with granules and preservative: ..... 12 months
- Lithium heparin: ..... 24 months
- Iodoacetate heparin: ..... 13 months
- Edta: ..... 24 months
- Citrate for coagulation: ..... 15 months
- Anticoagulants in containers: ..... 24 months
- Thrombocyte count and osmotic brittleness: ..... 24 months
- Reticulocyte vital staining: ..... 24 months

Procedures and controls

During the manufacturing process a lot of controls and guides are used, insisting on:
- Reproducibility dosing control
- Quantity and quality dosing control **(flame photometer)**
- Watertightness control **(vacuum, centrifugation and fluorescein method)**

Each case includes a brochure with recommendations of use.

Silicone tourniquet

0.8 thick and 19 mm wide. Non toxic, USP, Class VI, silicone.
Autoclavable.

code	description	quantity	weight	volume
GS-01	roll of 50 meters	1 x 50	0.85	0.0026
GS-02	box with 10 bands 0.5 m long each	1	0.10	0.001

Serum glucose serotub

CE (IVD)

Made of a clear polypropylene, supplied capped and labeled with an inert polyethylene cap.
To permit a fast serum separation of the blood clot, the tubes have an inert additive inside which speeds up the coagulation. This accelerator allows a mixture with the blood almost immediate and avoids the unnecessary sample dilution.
The coagulation speed is much higher than the obtained with the glass tubes or the other existing tubes on the market.
The inert **granules are rounded** to avoid erythrocytes lesions during centrifugation and minimize the risk of haemolysis. These granules are located between the clot and the separated serum working as a retaining wall. It assures a comfortable pipette action or serum decanting. (It isn't a watertight barrier). Inside the tube there is also a little amount of a glucose preservative, lithium iodoacetat, which maintains the sample stable up to 6 days and allows to make most of the biochemical measurements with an only tube (the exceptions are CPK and Lithium); so it's possible to save one of the two tubes used normally to determine routine tests and glucose respectively.
With the ergonomic features of the cap the design achieves a high reliability without avoiding the main characteristic of the cap: it's very easy to use.
On the label of each tube the lot number, expiry date and volume are printed.

Presentation: packed in black bags in order to maintain them out of the light because the iodum is photosensitive.
Keep these tubes at a temperature below 35 ºC.
Supplied in plastic racks.

code	description	case quantity	case weight	case volume	pallet quantity
600602	13 x 75 for 4 ml blood	12 x 100	4,92	0.033	42

Ask for minimum quantity and delivery time for tube 16 x 100, 10 ml blood.

Citrate for coagulation

CE (IVD)

Made of clear polypropylene, supplied capped and labeled.
Our sodium citrate, 3.8% or 3.2% concentration, buffered and sterile has a ratio citrate: blood 1:9 and is highly recommended for coagulation tests.
According to the prevailing rules, this liquid anticoagulant permits to determine the prothrombin time (Quick) **up to 12 hours after sample collection.**
The cap is not only easy-to-use but also assures a watertight closing; allowing a comfortable and reliable capping.
A volume indication mark, lot number and expiry date on the label of each tube, allows to assure the traceability of the product.
Tubes are supplied in plastic racks.

code	type of coagulant	description	case quantity	case weight	case volume	pallet quantity
601102	buffered to 3.8%	13 x 75 round for 4 ml blood	12 x 100	5.30	0.033	42
601103	buffered to 3.8%	13 x 75 round for 2.5 ml blood	12 x 100	5.30	0.033	42
601203	buffered to 3.2%	13 x 75 round for 2.5 ml blood	12 x 100	5.30	0.033	42

Serum tubes with clot accelerator and gel serum separator

CE (IVD)

Made of a clear polypropylene, supplied capped and labelled with an inert polyethylene cap.
The tubes are designed and processed to permit a fast serum and blood clot separation.
Each tube contains a special inert additive which accelerates the coagulation, and the result is a **fast clot retraction.**
The coagulation speed is, doubtlessly, much higher than the obtained with the glass tubes or the other existing tubes on the market.
The inert gel is located, after centrifugation, between the clot and the obtained serum and it works as a totally watertight barrier.
The ergonomic features of the cap design results in a very reliable and easy-to-use cap.

On the label of each tube the lot number, expiry date and volume are printed.

Supplied in plastic racks.
We strongly recommend its usage for biochemistry, routine tests, special biochemistry, markers, hormones, immunology (tube without anticoagulants).

code	description	case quantity	case weight	case volume	pallet quantity
600801	13 x 75 round for 4 ml	12 x 100	5.80	0.033	48
600800	15 x 100 round for 9 ml	6 x 120	6.00	0.040	36

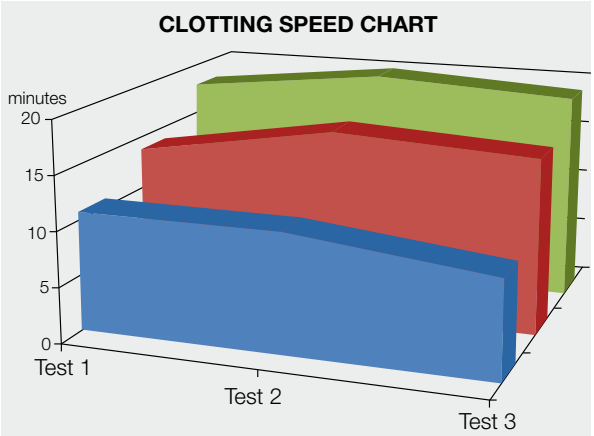
Serum tubes with clot accelerator and gel serum separation

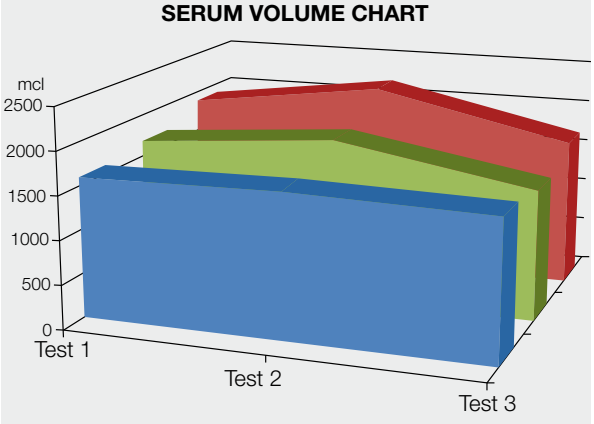
Clotting speed increased: with our the tubes processed with gel serum separator and accelerator we improve the clotting speed achieving a 20-25% advantage over glass tubes.
The serum is obtained after 12 minutes, depending on the particular working conditions.

Serum volume increased: The volume obtained is higher than the obtained with granules tubes or glass tubes, achieving an advantage around 20%. The gel serum separator tube is the preferred option when analysis requires maximum serum yield from the blood sample.

Recommended in case the objective is to obtain larger serum volume.

Note: Before using, the gel serum separator remains at the bottom, even when the tube is bent.





Glass tube | **Gel + accelerator** | Granules + Accelerator

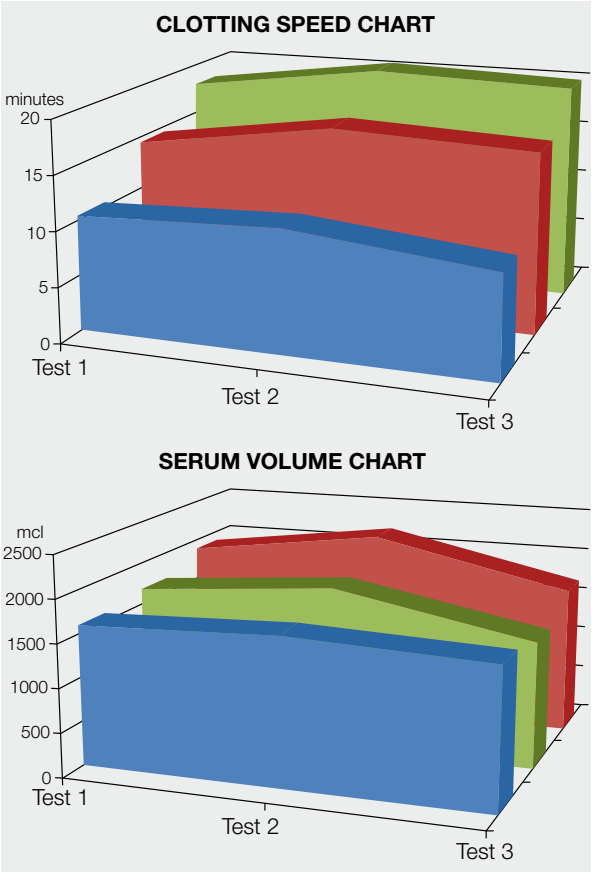
Serum tubes with clot accelerator and granule serum separator

CE (IVD)

Made of a clear polypropylene, supplied capped and labeled with an inert polyethylene cap.
The tubes are designed and processed to permit a **fast serum and blood clot separation.**
Each tube contains a special inert additive which accelerates the coagulation, and the result is a fast clot retraction. The coagulation speed is much higher than the obtained with the glass tubes or the other existing tubes on the market.
Allows the obtention of serum in 12 min.
The inert **granules are rounded** to avoid cellular lesions during centrifugation and minimize the risk of haemolysis. These granules are located between the clot and the separated serum working as a retaining wall. It assures a comfortable pipette action or serum decanting.(It isn't a watertight barrier).
The ergonomic features of the cap design results in a very reliable and easy-to-use cap.
On the label of each tube the lot number, expiry date and volume are printed.

code	description	case quantity	case weight	case volume	pallet quantity
600400	13 x 75 round for 4 ml	2 x 1,000	6.90	0.045	32
600300	16 x 100 round for 9 ml	2 x 500	6.10	0.045	32
707094*	bottle of 750 g with separator granules	20	17.50	0.045	40

* Not CE Product



Serum tubes with clot accelerator and granules

Clotting speed increased: with our the tubes processed with granules and accelerator we achieve a clotting speed higher than the obtained not only with glass tubes but also with gel tubes. The advantage achieved is around 40-50% over glass tubes.
Serum can be obtained starting from 12 minutes, depending on working conditions.

Serum volume increased: The volume obtained is a little higher than the obtained with glass tubes but fewer than the obtained with gel serum separator tubes.

Due to its effectiveness and low price this product is highly recommendable for all routine serum tests.

Glass tube Gel + accelerator **Granules + Accelerator**

Lithium heparin tubes

CE (IVD)

Made of a clear polypropylene, supplied capped and labeled, indicating **filling line, lot number, and expiry date.**
The anticoagulant pulverization inside the tube optimizes the mixture and avoids the unnecessary blood dilution.
The anticoagulant mechanism is the inhibition of the thrombin action.
Supplied in plastic racks.
Type of coagulant: **spray**.

code	description	case quantity	case weight	case volume	pallet quantity
601802	13 x 75 round for 4 ml blood	12 x 100	4.10	0.033	42
601803	13 x 75 round for 2.5 ml blood	12 x 100	4.10	0.033	42
601810	16 x 100 round or 10 ml blood	6 x 120	4.46	0.038	30

Iodoacetate lithium + heparin lithium tubes

CE (IVD)

Made of a clear polypropylene, supplied capped and labeled. On the label of each tube a fill line indicates the level of blood required, as well is printed the lot number and expiry date.
The anticoagulant and preservative pulverization inside the tube optimizes the mixture and avoids the unnecessary blood dilution.
The blend anticoagulant-glucose preservative is ideal for biochemical tests, so it's possible to determine most of the biochemical parameters with only one tube and preserve the product stable for 4 days. It is recommended to maintain the tubes in a dark and cool place (at room temperature).
The tubes are packed in black bags in order to maintain them out of the light because the iodum is photosensitive.
Supplied in plastic racks.
Type of coagulant: **liquid**.

code	description	case quantity	case weight	case volume	pallet quantity
602002	13 x 75 round for 4 ml blood	12 x 100	4.40	0.033	42
602003	13 x 75 round for 2.5 ml blood	12 x 100	4.30	0.033	42

Edta: tripotassium

CE (IVD)

Made of clear polypropylene, supplied capped and labeled.
Tetraceticetilendiamin acid, a tripotassium salt, works as an anticoagulant thanks to its capacity to fix the blood calcium. Because the anticoagulant is pulverized, it allows a mixture with the blood almost immediate.
The quantity of additive is very small so there are no dilution mistakes (this may occur in the tubes with big additive liquid solution volumes). There is no risk of anticoagulant loss when uncapping because it is adhered to the tube walls.
The cap shape, both internal and external design, assures a comfortable and reliable capping.
A volume indication mark, lot number and expiry date on the label of each tube, allows to assure the traceability of the product.
Supplied in plastic racks.
Type of coagulant: **spray**.

code	description	case quantity	case weight	case volume	pallet quantity
601612	15 x 50 fat for 4 ml blood	10 x 120	5.10	0.035	36
601613	15 x 50 flat for 2.5 ml blood	10 x 120	4.50	0.035	36
601603	13 x 75 round for 2.5 ml blood	12 x 100	4.10	0.033	42
601702	13 x 75 round for 4 ml blood	12 x 100	4.10	0.033	42

Edta: tripotassium. Rubber cap

CE (IVD)

Tubes made of clear polypropylene, supplied capped and labeled. Mauve, pierceable (but not pierced) and plugged cap made of thermoplastic rubber.
Suitable for hematological automatic machines.
The label indicates code, volume, lot number and expiry date, assuring total traceability.
Tubes supplied in trays of 100 units.
Type of coagulant: **liquid**.

mod.	code	description	case quantity	case weight	case volume	pallet quantity
1	**611603**	13 x 75 for 3 ml blood	10 x 100	5.30	0.034	48
2	**611604**	13 x 80 for 3 ml blood	8 x 100	3.00	0.030	50

Blood-plasma. Edta tubes: dipotassium

CE (IVD)

Made of clear polypropylene, supplied capped and labelled.
Tetraaceticetilendiamin acid, a dipotassium salt, works as an anticoagulant thanks to its capacity to fix the blood calcium.
Because the anticoagulant is pulverized, it allows a mixture with the blood almost immediate. The quantity of additive is very small so there are no dilution mistakes (this may occur in the tubes with big additive liquid solution volumes). There is no risk of anticoagulant loss when uncapping because it is adhered to the tube walls. The cap shape, both internal and external shape, assures a comfortable and reliable capping.
A volume indication mark, lot number and expiry date on the label of each tube, allows to assure the traceability of the product.
Supplied in plastic racks.
Type of coagulant: **spray**.

code	description	case quantity	case weight	case volume	pallet quantity
601402	13 x 75 round for 4 ml blood	12 x 100	4.30	0.033	42
601403	13 x 75 round for 2.5 ml blood	12 x 100	3.90	0.033	42
601412	15 x 50 flat for 4 ml blood	10 x 120	4.98	0.033	36
601413	15 x 50 flat for 2.5 ml blood	10 x 120	4.26	0.033	36

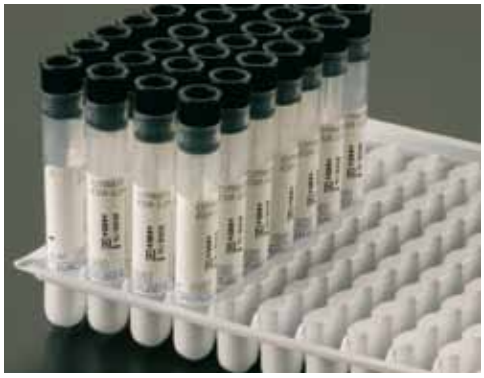
E.S.R. citrate tube

CE (IVD)

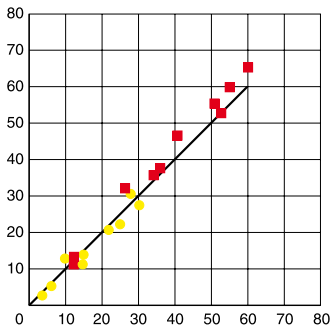
Capped and labeled transparent polypropylene tubes.
Filled with 3.8% sodium citrate (anticoagulant).
The citrate: blood ratio (according to the Westergren method) is 1:4, so the tubes contain 0.4 ml of stable 3.8% sodium citrate solution.
The printed fill line indicates 2.0 ml so 1.6 ml of blood will be added.
The cap design results in a comfortable and reliable handling, specially because it is possible working with gloves without slipping.
Volume fill line, expiry date and batch number are printed on the label; so the product traceability is guaranteed.
Supplied in 100 units plastic racks.

code	description	case quantity	case weight	case volume
601006	round tube 13 x 75 mm for 2 ml (1.6 ml of blood)	12 x 100	4.90	0.033

Pallet quantity: 42 cases.



Comparation of the ESR reading obtained with the Micro system and standard type



ESR reading with MICRO system (mm)

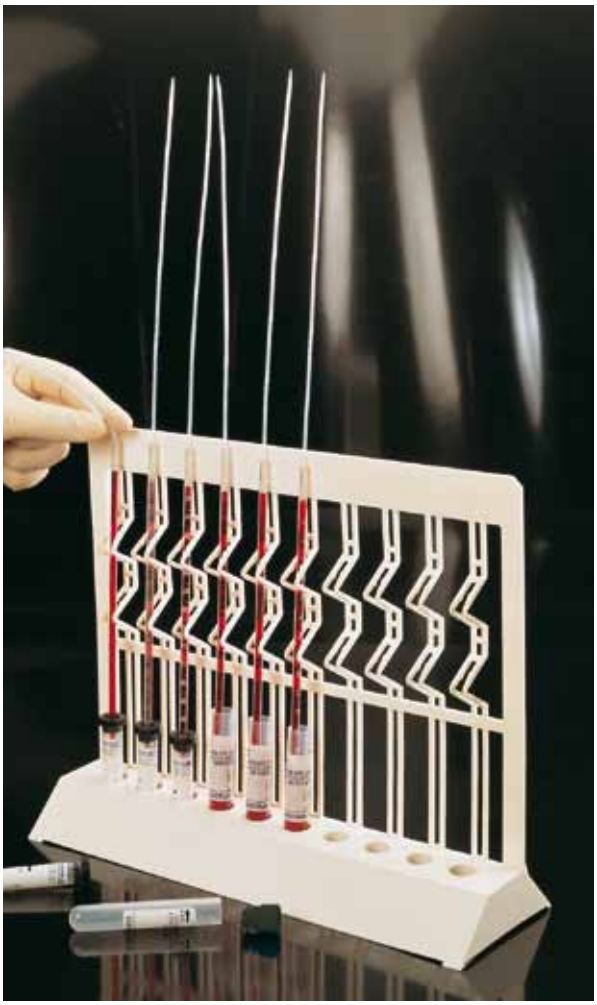
- Micro system reading at 50 minutes and with standard at 60 minutes.
- Micro system reading at 100 minutes and with standard at 120 minutes.

Sedirate micro system

CE (IVD)

System for the determination of the erythrocyte sedimentation rate. Specially recommended for **Paediatrics**. The system consists of a tube and a pipette. The tube includes a pierceable and re-sealable stopper (same model as the stoppers presented on all our tubes on next page) filled with 0.08 ml of trisodic citrate 0.106 M for 0.32 ml of blood according to standards of Westergren standard method.The pipette of pressure filling has an inner diameter of 1.25 mm and is graduated. Once blood and citrate are mixed together, introduce the pipette into the tube (without removing the stopper). The blood will automatically reach the 0 level. The results obtained are comparable to those obtained with the standard method (macro).

code	description	case quantity	case weight	case volume
27	set pipette + tube	400	3.28	0.029



E.S.R. semi micro system TAKIVES with self-levelling system

CE (IVD)

Pipette graduated from 0 to 160 mm, with a total length of 200 mm and an inner diameter of 2.5 mm, according to the Westergren Method.
The **system accepts a total volume of 1 ml.**
The plunger must be drawn up manually up to a limit inside the pipette to ensure an adequate volume of blood-citrate blend.
Two tubes available, both made of high transparency polypropylene:
Code **1164**: for 1 ml of total volume (0.75 ml of blood); with a pierceable rubber cap that allows inserting the pipette without taking off the cap.
Code **601006**: for 2 ml of total volume (1.6 ml of blood); with a polyethylene cap that shall be taken off before inserting the pipette.

code	description	case quantity	case weight	case volume
1360	graduated pipette	2 x 500	3.35	0.008
1361*	stand for 10 pipettes	5	3.20	0.023
601006	tube 13 x 75 mm with sterile citrate for 2 ml (1.6 ml of blood)	12 x 100	4.90	0.033
1164	tube 12 x 55 mm with citrate with pierceable cap	10 x 100	3.00	0.020

* Non CE product

E.S.R. with self-levelling system

CE (IVD)

Consists of a polystyrene pipette with self-filling system using a plunger suitable for 12 mm or 13 mm Ø tubes.
Graduated from 0 to 180 mm. 1.25 ml blood-citrate mixture is enough for determination.
Westergren method.

code	description	case quantity	case weight	case volume
29	E.S.R. pipette, 230 mm long graduated up to 180 mm	3 x 200	3.00	0.028
601006	tube 13 x 75 mm with sterile citrate for 2 ml (1.6 ml of blood)	12 x 100	4.90	0.033

E.S.R. system, EUROTUBO®

CE (IVD)

The E.S.R. system consists of a holder and a set of pipettes with a polyethylene filter.
Pipettes may be filled using an automatic suction pump, a pippetting bulb or pump, or a hand hold pippeter (both manual or electronic).
The holder accommodates up to 10 pipettes. Plastic pipettes are graduated up to 180 mm. Tubes are filled with sterile citrate (0.106 M).
Westergren method.

code	description	case quantity	case weight	case volume
28	pipette graduated up to 180 mm, length 230 mm	600	1.72	0.0039
1361*	holder to 10 places	5	3.20	0.023
601006	tube 13 x 75 mm with sterile citrate for 2 ml (1.6 ml of blood)	12 x 100	4.90	0.033

* Non CE product

Mailing container

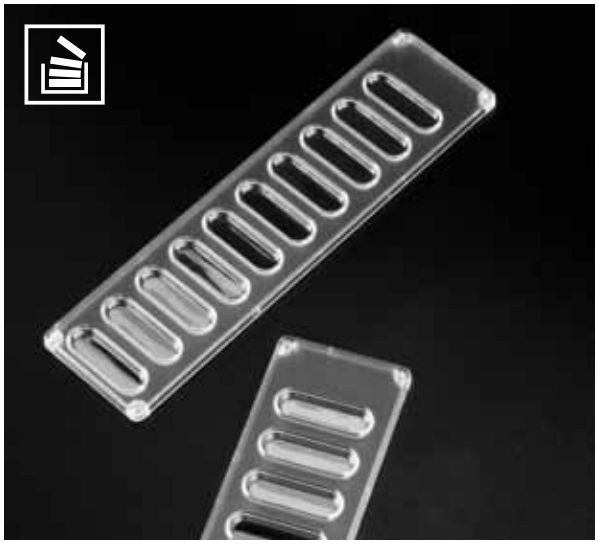
Mailing container with safety screw blue cap, both manufactured in polyethylene.
Leak proof.
Dimensions uncapped 128 x 30 mm. Ideal for 10 ml tubes.
The tube includes a piece of absorbent paper to prevent any leakage.
Container and cap are sold separately.

code	description	case quantity	case weight	case volume
401301	mailing container	500	7.70	0.090
401302	screw cap	500	2.00	0.095

Blood group test plate

Made of ultra clear polystyrene.
Features 10 numbered wells.
Stackable.
Dimensions: 160 x 40 x 6 mm.
Each case contains 50 bags of 10 units each.

code	description	case quantity	case weight	case volume
128030	blood group plate	25 x 10	3.70	0.014



Blood collection tubes with pierceable and re-sealable rubber caps

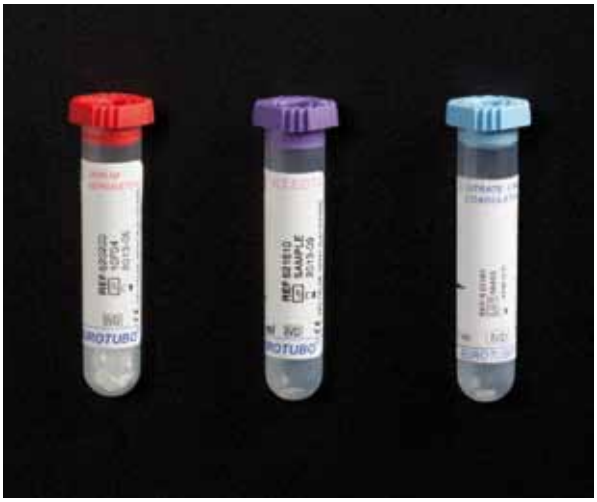
Manufactured from transparent polypropylene. Robust and resistant to breakage. Tubes feature a unique flexible rubber cap which has two cross cuts and is specially designed to reseal automatically after introduction or withdrawal of the sample. This system eliminates the need to remove the stopper when introducing or withdrawing blood samples. Tubes can be used with most manual, semi-automatic and automatic blood sampling machines, and are suitable for transportation by intra hospital pneumatic systems.

Blood collection tubes

CE (IVD)

code	type	description	expiration months	case quantity	case weight	case volume
620300	serum separator	16 x 100 with granules for 10 ml	36	6 x 100	4.20	0.034
620400	serum separator	13 x 80 with granules for 4 ml	36	8 x 100	3.20	0.030
621611	edta tripotassium	16 x 55 skirted for 2.0 ml	24	10 x 100	3.50	0.034
621613	edta tripotassium	13 x 80 for 2.5 ml	24	8 x 100	2.90	0.030
621102	citrate for coagulation	12 x 70 for 2 ml	15	8 x 100	2.40	0.030

Pallet quantity: 50 cases.



Special pediatrics

CE (IVD)

code	type	description	expiration months	case quantity	case weight	case volume
620200	serum separator	12 x 55 with granules for 2 ml	36	10 x 100	3.10	0.025
621610	edta tripotassium	12 x 55 for 1 ml	18	10 x 100	2.75	0.025
621101	citrate for coagulation	12 x 55 for 1 ml	15	10 x 100	2.80	0.025

Pallet quantity: 50 cases.

See speed sedimentation citrate for pediatrics in the page 74

Centrifugation guidelines

PROBLEM		POSSIBLE CAUSES	REASON FOR MISUSE	SOLUTION
The barrier is not clearly defined	**Poor or incomplete serum separation. Barrier is intact and well defined**	Incomplete or inhibited coagulation. Non-homogeneous blend of blood and coagulant	The tube was not inverted for 5 times	After tube is filled with blood and capped, gently invert the tube for 5 times
		Early centrifugation, insufficie nt allowance coagulation time prior to centrifugation	The recommended 30 min. standing time for coagulation was not observed	Wait for 30 min before centrifugation
		Centrifugation xg-setting under appropriate value	The tube was not centrifuged at or above the minimum, appropriate xg-setting	a) Set the centrifuge between 1,000-1,500 xg b) Confirm centrifuge is correctly calibrated
	Barrier is skewed and poorly formed, separation is incomplete	Less centrifugation time than recommended	The tube was not centrifuged for the required time	Centrifuge the tube at the appropriate xg-force for at least 10 min
		Refrigerated centrifuge	The temperature of the centrifuge was lower than the recommended	a) Keep the centrifuge at a temperature between 24 ºC and 26 ºC (around 77 ºF). b) Thermally insulate the tube and avoid contact with the centrifuge and centrifuge rotor
Blood tubes fracture during centrifugation		xg-force centrifugation exceeded the tube construction	The tube was subjected to xg-forces exceeding 1,500 xg	Maintain centrifuge at or below 1,500 xg
		Centrifuge not positioned level and/or foreign matter or debris inside the rotor of the centrifuge	a) Shock absorbers or tube stand-off cushions absent. b) The inside of the rotor is not clean	Install shock absorbers or tube stand-off cushions as required. Remove any foreign agent or debris that may be inside the centrifuge
Cell clumps observed within the separation barrier		Incomplete or inhibited coagulation. Non-homogeneous blend of blood and coagulant	The tube was not inverted for 5 times	Invert the tube for 5 times
		Insufficient time before centrifugation	The recommended 30 min standing time for coagulation was not observed	Wait for 30 minutes before centrifugation
		Excessive xg-force centrifugation	The tube was centrifuged at above 1,500 xg	Set the centrifuge at a speed below 1,500 xg
Presence of fibrin in serum		Incomplete or inhibited coagulation. Non-homogeneous blend of blood and coagulant	The tube was not inverted for 5 times	Invert the tube for 5 times
		Early centrifugation, insufficient allowance coagulation time prior to centrifugation	The recommended 30 min standing time for coagulation was not observed	Wait for 30 minutes before centrifugation
Abnormal assay results		Poor serum quality due to haemolysis	Blood subject to aggressive agitation or rough handling	Handle tube with moderation. Invert gently. Never shake severely or agitate the tube
		Excessive xg-force centrifugation	The tube was centrifuged above 1,500 xg	Set the centrifuge to a maximum of 1,500 xg xg-force

Anticoagulants and preservatives in containers

Available in bottles of 15 ml.
The dosage of one drop (15 ml = 300 drops) is enough for 5 ml of blood.
Both products have preservatives for stability.

code	description	case quantity
705000	lithium heparin 15 ml	10
705010	tripotassium edta 15 ml	10

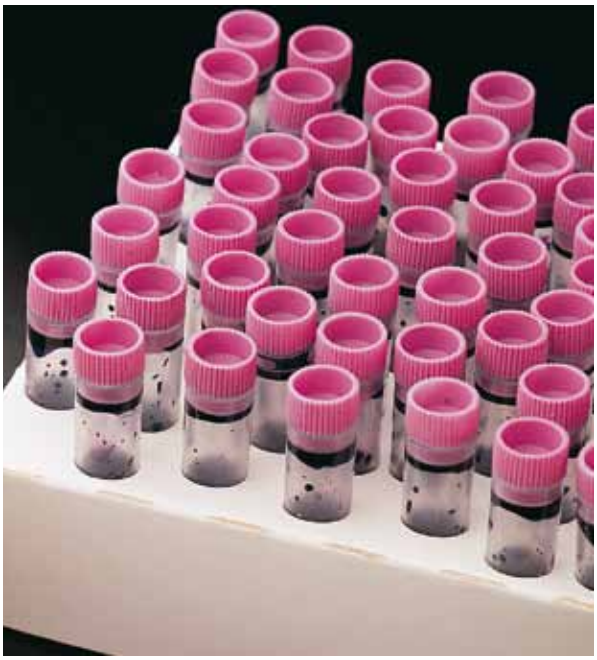
Special techniques

Liquid for thrombocyte count determination:
Due to its optical characteristics it identifies the thrombocyte avoiding confusion with other cells. This reagent also prevents adhesion and aggregation of the thrombocytes.
Full instructions are included with the kit.

Test of osmotic brittleness of the erythrocytes:
The test for the erythrocyte osmotic fragility detects the resistance of these cells to haemolysis, in hypotonical solutions with decreasing concentration of sodium chloride.
This set contains 2 complete tests and each one is composed of 12 tubes with stable and buffered solutions. Full instructions are included in the kit.

code	description	case quantity	case weight	case volume
800000	thrombocyte counting kit 1 x 50 tubes	30 kits	5.50	0.046
802000	osmotic brittleness of erythrocytes kit 2 x 12 plus 2 lithium heparine tubes	30 kits	7.50	0.046

Minimum order quantity: 1 kit.



Reticulocyte staining kit

CE (IVD)

This simple to use kit consists of a tube containing 100 µl of stable buffered bright cresil blue stain which allows the determination of the erythrocyte count.
Two to three drops of blood are added directly to the tube and incubated for 10 minutes at room temperature.
The erythrocytes become a pale blue colour making them easy to identify.
Full instructions are included with the kit.
Tube made of polypropylene and cap of mauve polyethylene.

code	description	case quantity	case weight	case volume
801000	reticulocyte count kit (1 x 50 tubes)	30 kits	5.50	0.046

Minimum order quantity: 1 kit.

Haematological stains

CE (IVD)

code	description	case quantity	case weight	case volume
808000	Eosin, solution, May Grunwald, 250 ml bottle Danger symbols: R11-23/24/25-39/23/24/25. S 7-16-36/37-45	16	4.30	0.015
808001	Eosin, solution, May Grunwald, 1000 ml bottle Danger symbols: R11-23/24/25-39/23/24/25. S 7-16-36/37-45	12	13.00	0.046
808100	Eosin, solution modified Giemsa, 250 ml bottle Danger symbols: R11-23/24/25-39/23/24/25. S 7-16-36/37-45	16	5.15	0.015
808101	Eosin, solution modified Giemsa,1000 ml bottle Danger symbols: R11-23/24/25-39/23/24/25. S 7-16-36/37-45	12	13.00	0.046
808200	Eosin, solution Wright, 250 ml bottle Danger symbols: R11-23/24/25-39/23/24/25. S 7-16-36/37-45	16	4.40	0.015
805013	fast stain for blood extensions, 250 ml containers, Kit with 2 containers A and 2 containers stain B	12 Kits	20.00	0.046

Please see more information (page 99 about these stains at Chapter 4. **Histology, Microscopy and Staining**.

Microhaematocrit capillary tubes

CE (IVD)

Soda neutral glass tubes with a colour-coded print for an easier identification, with sodium heparin (red) or without heparin (blue).
Supplied inside a glass tube with a plastic cap, specifying code, lot and expiry date.
Two lengths available: 70 or 75 mm.
Internal diameter: 1.15 mm, external diameter: 1.55 mm.
They meet ISO 12772.

code	description	volume µl	case quantity	case weight	case volume
7301	75 mm with heparin	75	10 x 100	0.36	0.001
7311	75 mm without heparin	75	10 x 100	0.36	0.001
7401	70 mm with heparin	70	10 x 100	0.36	0.001
7411	70 mm without heparin	70	10 x 100	0.36	0.001

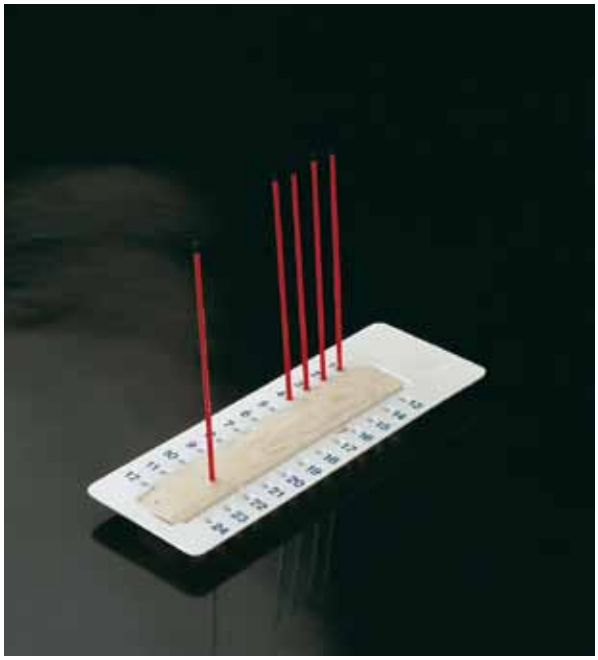
Capillary tubes sealing wax

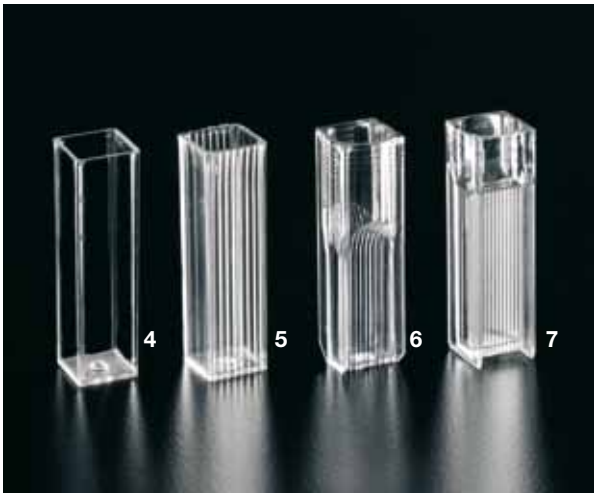
Vinyl plastic wax, in a numbered (from 1 to 24) plastic holder.

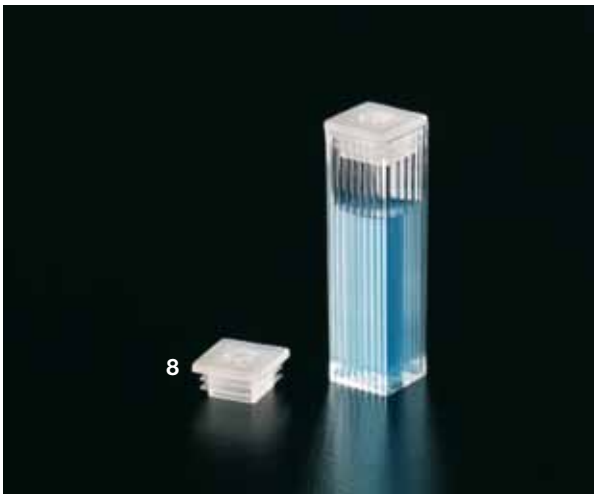
Suitable for all capillary tubes, specially for those that have to be centrifuged, like microhaematocrit capillary tubes.

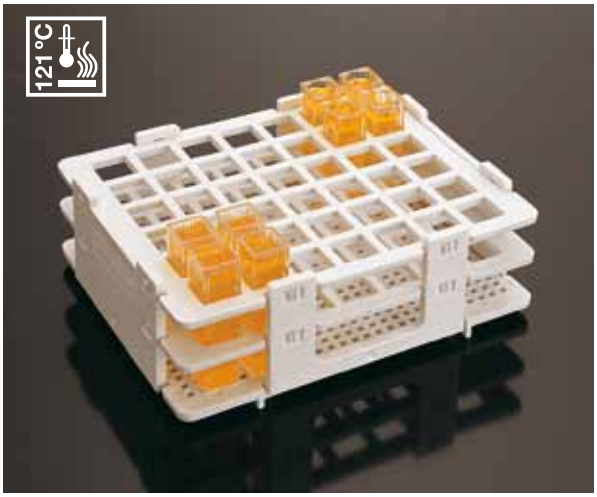
Must be preserved in temperatures from 8 ºC to 30 ºC.

code	description	case quantity	case weight	case volume
7600	sealing wax	3	0.050	0.001









Spectrophotometer cuvettes

Disposable cuvettes suitable for most of the open spectrophotometers. Homogeneous measures, specially of the surface crossed by the light beam, assuring an optimum transmission level on the whole visible spectral.

The material used avoids any possible measurement interference. Due to the strict quality control during the manufacture process, a high reliability is assured. The maximum absorption variations are ± 1%.
The two sides not crossed by the light beam are ribbed to an easy identification of the cuvette position inside the spectrophotometer measurement chamber, resulting in an easy positioning and removal.

They are supplied in a dust proof, expandable polystyrene box (100 units per box) with lid.

Dimensions: 12.55 x 12.65 x 44.55 mm (± 0,1 mm).
Light path: 10 mm.

Standard cuvettes

Made of polystyrene for assays in the visible spectral range (340 to 800).

	code	description	case quantity	case weight	case volume
1	**302000**	4.5 ml macro	5 x 100	1.60	0.018
2	**302100**	1.5 ml micro	5 x 100	1.60	0.018
3	**302400**	2.5 ml semimicro	5 x 100	1.60	0.018

Special UV grade cuvettes

Made of UV grade PMMA for accuracy throughout UV/Vis range (280 to 800).

Model **303100** with four clear sides is ideal for fluorometry and nephefelometry.

	code	description	case quantity	case weight	case volume
4	**303100**	4.5 ml 4 sides transparent	5 x 100	1.60	0.018
5	**303102**	4.5 ml macro	5 x 100	1.60	0.018
6	**303101**	2.5 ml semimicro	5 x 100	1.60	0.018
7	**303103**	1.5 ml micro	5 x 100	1.60	0.018

Cap

In polyethylene. Suitable for the macro cuvettes, 4.5 ml (**302000**, **303100**, and **303102**)

	code	description	case quantity	case weight	case volume
8	**304000**	polyethylene cap	1,000	0.20	0.0024

Please see our rack for the spectrophotometer cuvettes, code **M-100**, on Chapter 9. **Sample Storage.**

- Polypropylene
- **Autoclavable**
- Assembling rack that saves space
- Capability: 42 cuvettes

Sample cups

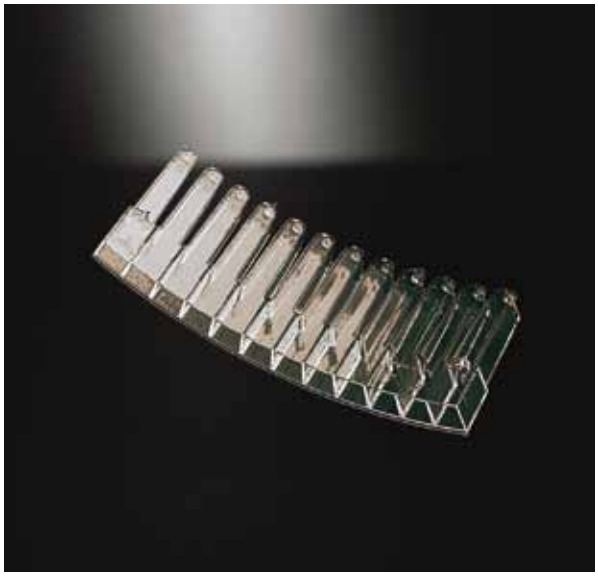
Polystyrene cups, with polyethylene caps.

mod.	code	description	type	Ø ext. mm	h mm	case quantity	case weight	case volume
1	**900024**	0.50 ml	Gemsaec, Kone Lab 20	13.55	24.50	10 x 1,000	12.70	0.069
2	**900023**	0.25 ml	Centrifichem	13.70	16.40	14 x 1,000	15.00	0.069
3	**900022**	1.50 ml	Technicon	13.80	22.60	10 x 1,000	10.60	0.069
4	**192503**	1.50 ml	Technicon RA 1000	13.90	24.70	12 x 1,000	10.50	0.060
5	**910022**	2.00 ml	Technicon	13.75	24.90	10 x 1,000	10.00	0.070
6	**900026**	push on cap suitable, for all models	–	16.00	8.50	20 x 1,000	3.50	0.069

Cobas Mira cuvette segments

Multicuvettes made of PMMA.
Rack made of polypropylene (colour: red).
For use on Cobas Mira.
Light path: 6 mm.
Complete rack with 15 segments of 12 cuvettes.

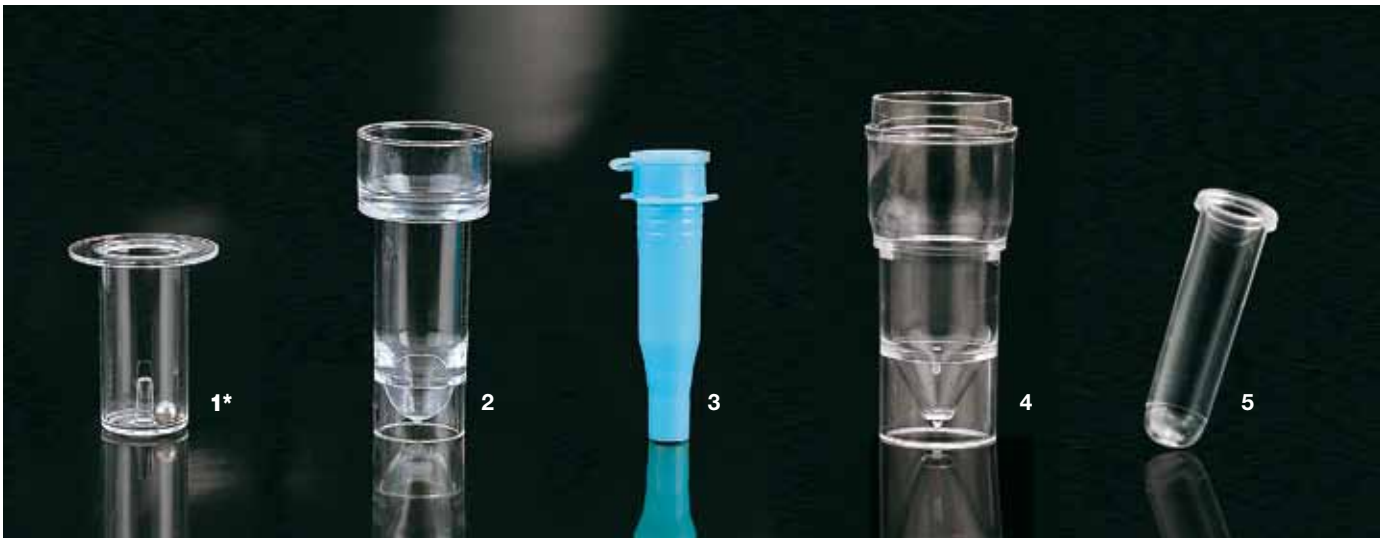
code	description	case quantity	case weight	case volume
900019	complete rack: 15 segments of 12 cuvettes	30	9.00	0.040



Coulter counter cups

Coulter counter cups: single use polystyrene cups suitable for any Coulter counter for cell counting.
Two models available, with or without lid.
Volume: 20 ml.
Dimensions: 30 x 56 mm (Ø x h).

code	description	case quantity	case weight	case volume
200103	coulter counter cup with lid	1,000	7.80	0.087
200102	coulter counter cup without lid	1,400	8.70	0.120



Sample cups

Cups are made of polystyrene, except code **900008** which is made of HDPE.

mod.	code	description	type	Ø ext. mm	h mm	case quantity	case weight	case volume
1*	**900005.1**	1.5 ml, cup with steel	Amelung	18.65 / 11.25	22.8	12 x 1,000	9.40	0.092
2	**900020**	2.50 ml	Hitachi	16.75	38.0	6 x 1,000	10.75	0.069
3	**900008**	0.70 ml	Cobas bio	7.65	35.5	12 x 1,000	8.35	0.067
4	**910023**	4.00 ml	Technicon	16	37.9	6 x 1,000	12.20	0.069
5	**910026**	0.5 ml (0.8 ml total volume)	Sysmex	9.95 / 7.94	29.8	10 x 2,000	13.50	0.056

* 12 bags of 1,000 sample cups and 12 dispenser containers of 1,000 balls.

Scintillation vials

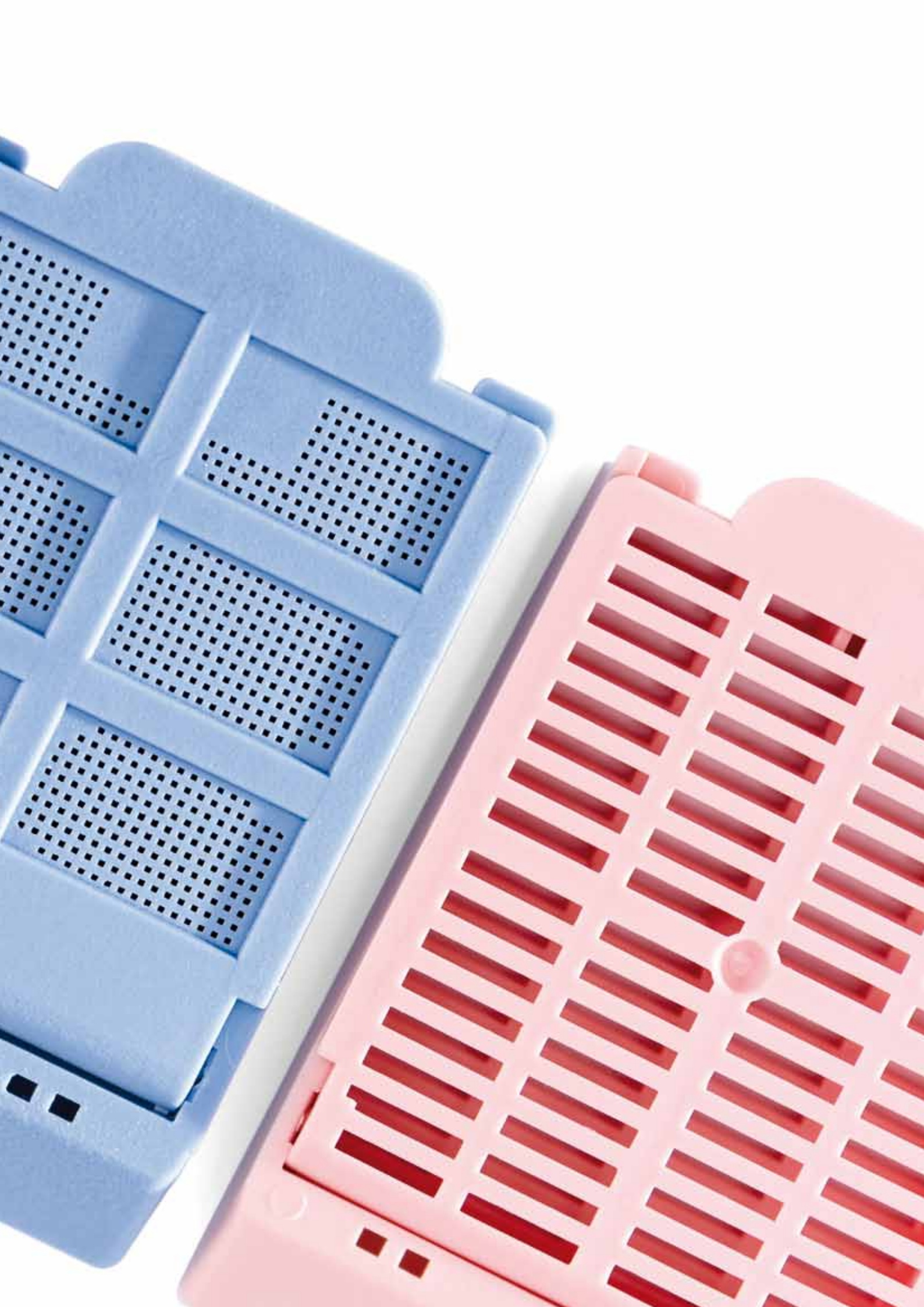
Single use vials made of high density polyethylene to minimize solvent losses.
Screw caps ensure a leakproof seal.
Compatible with most liquid scintillation counters available on the market.
2 models available: code **900100**, standard volume 20 ml, and code **900101**, volume 4 ml, designed for insertion in the 20 ml vial so as to minimize the volume of scintillation liquid.
Dimensions: Vial 20 ml: 26.5 x 58.5 mm (Ø x h)
Minivial 4 ml: 13.71 x 53.15 mm (Ø x h).

code	description	case quantity	case weight	case volume
900100	scintillation vial (20 ml)	1,000	7.90	0.069
900101	minivial (4 ml) for the above vial	2,000	5.90	0.042

Beakers for cell counters

Single use beakers ideal for dilutions and cell counting in Toa and Royco-Hycel cell counters.
Both models are made of polyethylene.

code	baker type	Ø mouth mm	Ø base mm	h mm	vol. ml.	case quantity	case weight	case volume
1988314	Toa	30.5	25	68.6	30 ml	3,000	6.54	0.039
1988315	Royco-Hycel	30.5	26	57.5	25 ml	3,000	6.50	0.039



Polyethylene wide mouth jars with lid and insert plug

High density Polyethylene jars with screw cap and insert plug.
Jars and plugs are natural transluscent; lids are black.
Upon request, jars can be supplied individually wrapped for a minimum order of 3 cases for each code, and sterile for a minimum order of 6 cases, for each code.

code	capacity ml	Ø neck mm	Ø base mm	heigth mm	case quantity	case weight	case volume
202811	30	25	32	53	100	1.00	0.011
202810	60	38	52	48	200	3.30	0.045
202808	90	51	60	51	150	3.90	0.045
202809	125	51	60	62	200	6.00	0.082
202801	170	51	60	80	160	6.46	0.082
202802	250	54	67	100	125	5.24	0.078
202814	400	60	74	124	130	8.00	0.140
202803	500	67	80	131	120	8.40	0.140
202821	500	86	103	93	95	9.20	0.140
202813	750	86	103	127	75	7.70	0.140
202818	1,000	86	103	157	50	7.00	0.140

See more capacities on pages 280-281

Jars with lid

Body and lid in white **autoclavable** polypropylene.
Self sealing security lid.
Made with materials suitables for alimentary use.
Code **241014** embodies a plastic handle.
Jars are supplied uncapped.

code	nominal capacity ml	Ø int. mouth x Ø base x height mm	weight g	case quantity	case weight	case volume	casses per pallet
241010	250	84.5 x 79.5 x 62	18	150	3.03	0.042	32
241011	550	107 x 98 x 80	32	250	5.01	0.103	16
241013	1,000	112.5 x 112 x 137.5	46	150	7.68	0.078	20
241014	1,560	133.5 x 134 x 140	58	150	4.42	0.130	16

Tamper evident, buckets with lid

Disposable containers made of **autoclavable** polypropylene. Made with materials suitables for alimentary use. Include tight fitting and leakproof lids.
All models include a sturdy and convenient white plastic handle for easier carrying. Buckets are supplied with lid apart.

code	capacity l	Ø int. mouth mm	height mm	body weight g	case quantity	case weight	case volume	casses per pallet
222802	3	184.00	137.50	105.00	80	9.00	0.140	16
222803	4.5	210.00	156.00	134.00	48	10.46	0.130	16
222804	5.6	211.00	194.00	152.00	45	11.58	0.130	16
222805	10.6	251.00	263.00	314.00	20	10.50	0.130	16

EUROTUBO® Leak proof screw cap containers

CE (IVD)

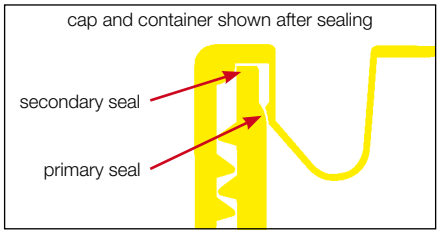
Specially designed for histology, they are provided with double internal security closure. Manufactured in translucent polypropylene with polyethylene ribbed yellow cap. They have moulded graduations in increments of 50 ml, and a ring in the upper part of the container that prevents dripping when decanting liquids. Its leakproof closure makes them ideal for liquid (including alcohols) or solid sample storage.
They meet the standard UNE-EN 14401:2005 Rigid plastic containers. Methods to test the effectiveness of closures.
Supplied uncapped. Other cap colours available upon request.

mod.	code	capacity ml	external mouth Ø mm	height mm	case quantity	case weight	case volume	cases per pallet
1	**202845**	250	89	57	100	4.68	0.046	32
2	**202846**	500	90	110	200	10.96	0.084	20
3	**202847**	1,000	111	139	100	11.40	0.097	16

Security screw cap containers

CE (IVD)

Ultra clear polypropylene containers with yellow polyethylene cap.
Watertight closure: the cap, with an innovative shape, has a double closure.
Graduated Container.
The base and the cap are ribbed so the handling with gloves is comfortable and reliable.
There is a ring in the upper part of the body, in order to avoid the dripping in case of liquid decanting.
Six different capacities from 20 to 120 ml.



Find more information about this product on Chapter 7.
Sample containers

Paraffin

CE (IVD)

It has a low dimethylsulphoxyde content and a quick penetration of tissues for 2 micron cuts.
Melting point: **56/58 °C**. Can be used with usual solvents.
Ideal for histology.

mod.	code	description	case quantity	case weight	case volume
1	440139	Paraplast Plus® - 1 kg bag	8 bags	8.6	0.021
NEW 2	440139P	paraffin - 1 kg bag	6 bags	6.5	0.021

Histology mould

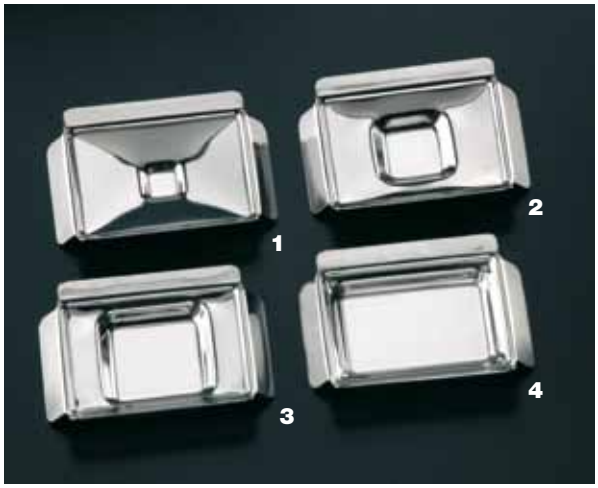
Single use clear polypropylene mould. Can be re-used.
The smooth interior ensures the paraffin does not adhere to the mould. The special material used ensures excellent thermal exchange. Available in various sizes.
External dimensions: 50 x 37.2 x 12 mm.
Suitable for the most of cassettes.

mod.	code	well dimensions mm	case quantity	case weight	case volume
1	440131	15 x 15 x 5	1,000	2.20	0.013
2	440132	24 x 24 x 5	1,000	2.20	0.013
3	440133	30 x 24 x 5	1,000	2.20	0.013

Metal tray histology

Material: stainless steel.
External dimensions: 52 x 35 x 11 mm.

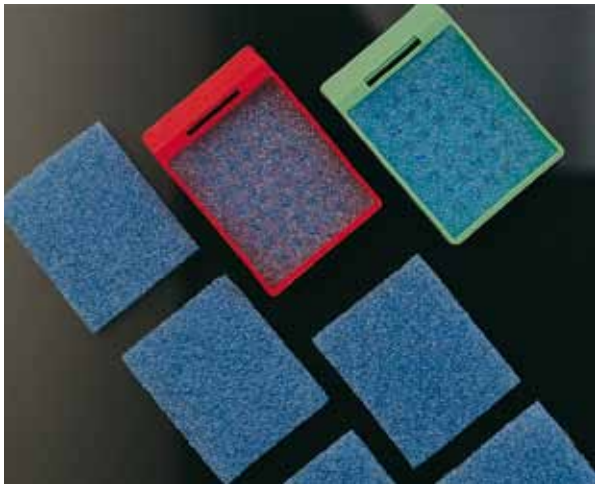
mod.	code	well dimensions mm	bag quantity	bag weight	bag volume
1	192931	7 x 7 x 7	10	0.08	0.0001
2	192932	15 x 15 x 7	10	0.08	0.0001
-	192933	24 x 24 x 7	10	0.09	0.0001
3	192934	30 x 24 x 7	10	0.09	0.0001
4	192935	37 x 24 x 7	10	0.09	0.0001

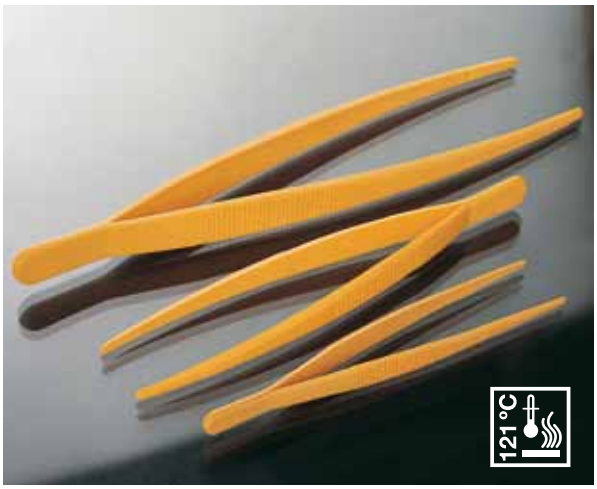


Tissue embedding sponge

Foam sponge, very useful for small specimens in biopsy tests.
Fits standard cassettes.
Avoids sample loss though drain holes when sample is processed.
Does not affect paraffin drainage.

code	dimensions mm	colour	case quantity	case weight	case volume
192922.04	32 x 26 x 3	blue	500	0.06	0.002

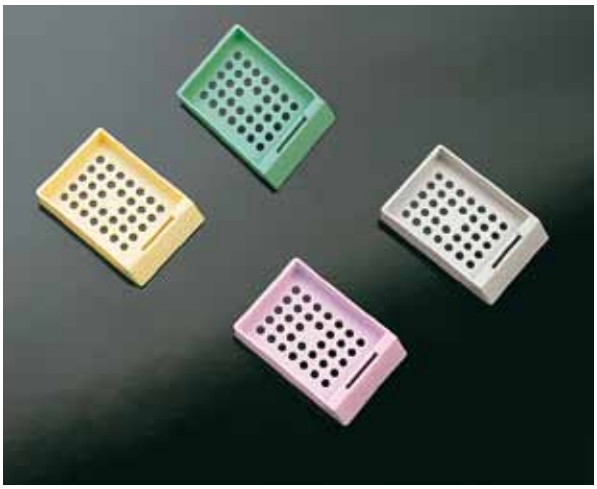




Forceps

Made of P.O.M.
Colour: orange.
Self-sprung forceps with rounded ends.
Code **19503**, the inner part of the tip is ribbed to enhance sampling. Ribbed for a better handling.
Autoclavable. Flexible.

code	length mm	case quantity	case weight	case volume
19500	115	5	0.23	0.0006
19501	145	5	0.05	0.00005
19503	250	5	0.17	0.0043



Cassettes without lid

Made of polyacetyle.
With 34 round holes of 2 mm Ø.
Resistant to the solvents used in histological processes. It is possible to write on them.
External dimensions: 40 x 28 x 6 mm.

code	colour	case quantity	case weight	case volume
440141	white	3 x 1,000	7.00	0.047
440147	green	3 x 1,000	7.00	0.047
440144	pink	3 x 1,000	7.00	0.047
440143	yellow	3 x 1,000	7.00	0.047

Lids for cassettes

Stainless steel lids.
Fit all standard cassettes.
Suitable for **440141** and series.

code	description	case quantity	case weight	case volume
440149	lid for cassettes	25	0.07	0.0005

Cassette for biopsy 6 compartments

Material: polyacetyle.
Designed for small biopsies, each cassette has six individual cells to hold six samples.
Each cell is 7 x 12 mm. The lid allows multiple opening and closing. A frosted area allows writing on the cassette.
Each cassette has near 3,000 micro holes of 0.26 mm diameter.

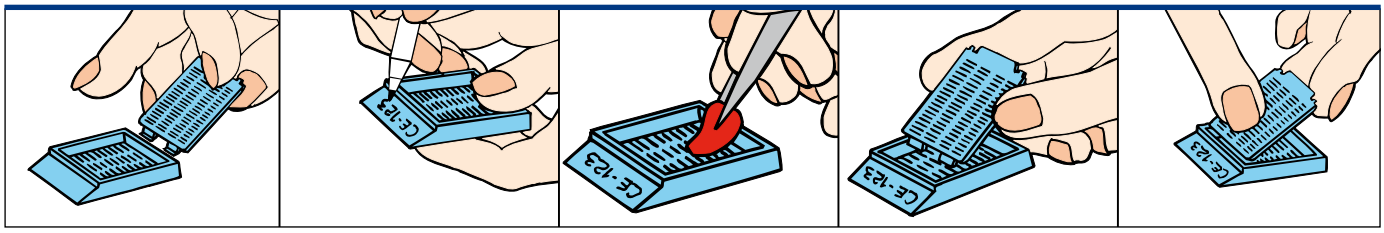
code	colour	case quantity	case weight	case volume
44240	pink	4 x 250	5.20	0.026
44241	white	4 x 250	5.20	0.026
44245	blue	4 x 250	5.20	0.026

Ask for minimum quantity and delivery time of other colours.

CASSETTES HISTOSETTE I

- Made of polyacetal.
- Air vents allowing more efficient filling with paraffin.
- Safety closure.
- External dimensions: 40 x 28 x 6 mm (with closed lid)
- With one-piece integral lid.
- To lock the cassette, just snap apart the lid, turn it round and lock it into the base of the cassette.
- They may be opened and closed as many times as required.

HOW TO USE

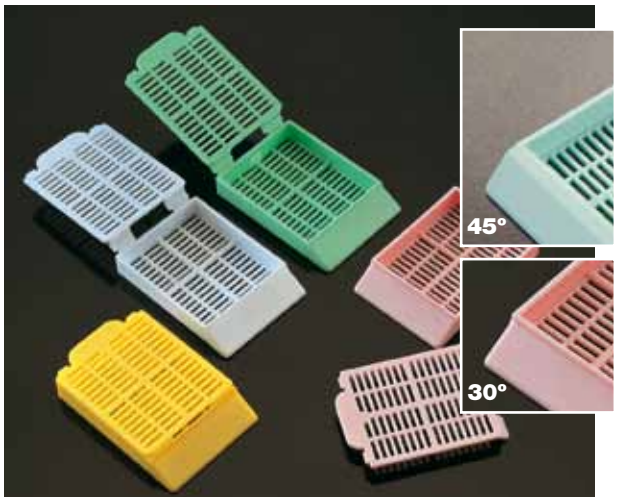


Cassettes pour tissus. Histosette I

Writing area at 30º or 45º angle, depending on the code.
64 cuts (1 x 5 mm) in base and lid, distributed 16 x 4.

code 30º	code 45º	colour	case quantity	case weight	case volume
454141	**454111**	white	3 x 500	5.40	0.039
454147	**454117**	green	3 x 500	5.40	0.039
454140	**454110**	pink	3 x 500	5.40	0.039
454143	**454113**	yellow	3 x 500	5.40	0.039
454148	**454118**	blue	3 x 500	5.40	0.039

Ask for minimum quantity and delivery time for other colours.

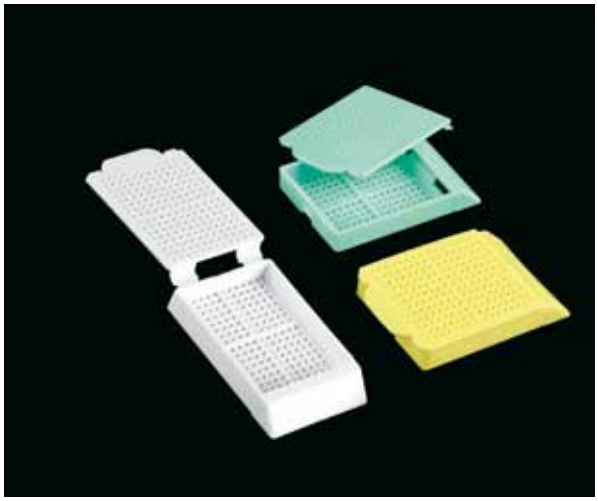


Cassettes for biopsy. Histosette I

Writing area at 45º angle.
224 draining holes (1 x 1 mm).

code	colour	case quantity	case weight	case volume
554111	white	3 x 500	6.35	0.034
554117	green	3 x 500	6.35	0.034
554113	yellow	3 x 500	6.35	0.034

Ask for minimum quantity and delivery time for other colours.



Cassettes for tissue

Made of acetal polymer. With an integral lid.
Small tab on the lid for easy opening and locking.

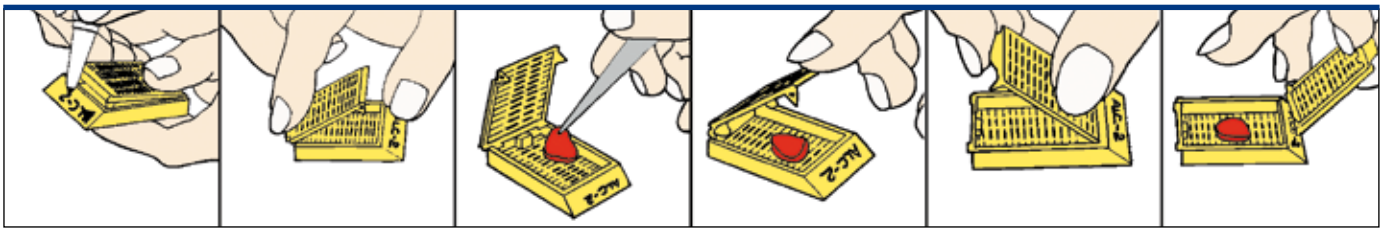
code	colour	case quantity	case weight	case volume
554141	white	4 x 500	7.58	0.064
554147	green	4 x 500	7.58	0.064
554140	pink	4 x 500	7.58	0.064
554143	yellow	4 x 500	7.58	0.064
554148	blue	4 x 500	7.58	0.064

Ask for minimum quantity and delivery time for other colours.

CASSETTES HISTOSETTE II

- Made of polyacetal.
- Hinged lid: can be opened and closed as often as necessary.
- Supplied assembled, saving time and making storage easier.
- External dimensions: 41 x 28 x 6 mm.
- Air vents allowing more efficient filling with paraffin.
- Easy handling with one hand.
- Safety closure (see figure).
- Writing area slanted at a 45º angle, suitable to be used with most labelling instruments.

HOW TO USE



Cassettes for tissue. Histosette II

Material: acetal polymer. 64 cuts in base and lid.
Cassettes and lids are available: pre-mounted, or with the lid separated in another case.

code	colour	case quantity	case weight	case volume
Cassettes with the lid pre-mounted:				
44140	pink	3 x 500	5.00	0.026
44141	white	3 x 500	5.00	0.026
44143	yellow	3 x 500	5.00	0.026
44145	blue	3 x 500	5.00	0.026
44147	green	3 x 500	5.00	0.026
Cassettes with the lid separated:				
441140	pink	2 x 500*	3.56	0.025
441141	white	2 x 500*	3.56	0.025
441143	yellow	2 x 500*	3.56	0.025
441145	blue	2 x 500*	3.56	0.025

*2 dispensing boxes with 500 cassettes each plus one box containing 1,000 lids.

Cassettes for biopsy. Histosette II

Made of acetal polymer. 224 holes. 1 mm square openings to maximize fluid exchange and to ensure proper drainage.
Cassettes and lids are available: pre-mounted, or with the lid separated in another case.

code	colour	case quantity	case weight	case volume
Cassettes with the lid pre-mounted:				
445140	pink	3 x 500	5.20	0.026
445141	white	3 x 500	5.20	0.026
445143	yellow	3 x 500	5.20	0.026
445145	blue	3 x 500	5.20	0.026
445147	green	3 x 500	5.20	0.026
Cassettes with the lid separated:				
451241	white	2 x 500*	3.90	0.026
451243	yellow	2 x 500*	3.90	0.026
451245	blue	2 x 500*	3.90	0.026

*2 dispensing boxes with 500 cassettes each plus one box containing 1,000 lids.

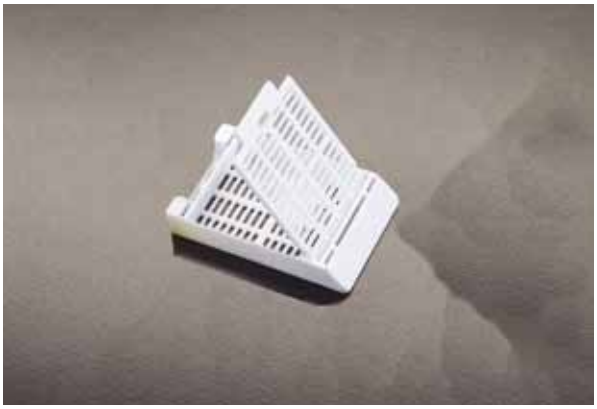
CASSETTES SLIMSETTE

- Made of polyacetal.
- Hinged lid: can be opened and closed as often as necessary.
- Supplied assembled, saving time and making storage easier.
- Hinged lid may be separated if required.
- Dimensions: 41 x 28.5 x 6 mm.
- Easy handling with one hand.
- Safety closure.
- Air vents allowing more efficient filling with paraffin.
- Writing area slanted at a 45º angle, suitable with most labeling instruments.

- Only 6 mm high, allowing more cassettes to be stacked in automated labeling machines and in storage cabinets.
- Two versions available: single cassettes and in stacks for Leica® and Sakura® labeling instruments.

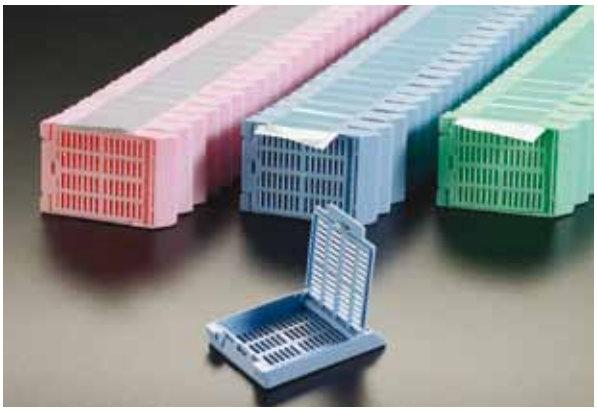
Cassettes for tissue. Slimsette

Quick drainage thanks to 114 vents each measuring 5 x 1 mm.



code	colour	case quantity	case weight	case volume
Single cassettes (The main case contains three dispenser boxes of 500 cassettes each)				
555141	white	3 x 500	5.01	0.025

Ask for minimum quantity and delivery time for other colours.



code	colour	case quantity	case weight	case volume
Stacks for Leica® and Sakura® (each case contains 50 stacks of 40 cassettes)				
555251	white	50 x 40	7.12	0.023
555258	blue	50 x 40	7.12	0.023

Ask for minimum quantity and delivery time for other colours.

Cassettes for biopsy. Slimsette

Quick drainage thanks to its 224 vents (0.8 x 0.8 mm).

code	colour	case quantity	case weight	case volume
Single cassettes (The main case contains three dispenser boxes of 500 cassettes each)				
44151	white	3 x 500	5.01	0.025

Ask for minimum quantity and delivery time for other colours.

code	colour	case quantity	case weight	case volume
Stacks for Leica® and Sakura® (each case contains 50 stacks of 40 cassettes)				
44351	white	50 x 40	6.84	0.022
44355	blue	50 x 40	6.84	0.022

Ask for minimum quantity and delivery time for other colours.

CASSETTES SWINGSETTE

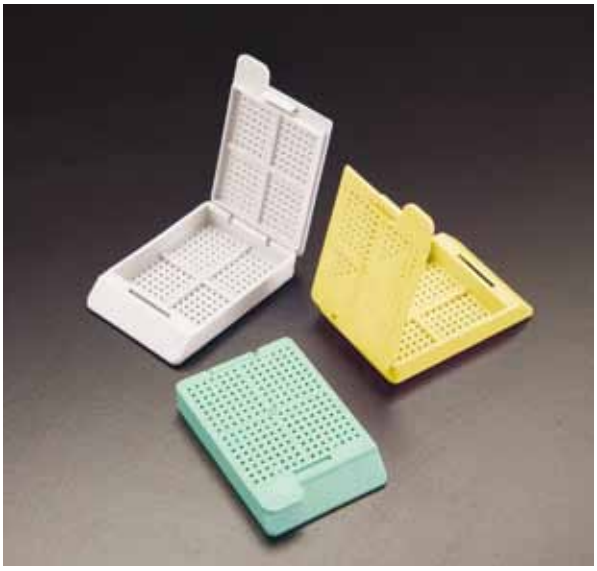
- Made of polyacetal.
- Cassettes type Richard-Allan® and Surgipath® Multi-Cassette (Leica)
- Hinged lid: can be opened and closed as often as necessary.
- Supplied assembled, saving time and making storage easier.
- Dimensions: 42 x 28 x 6 mm.
- Large tab for convenient an easy opening
- Easy handling with one hand.
- Safety closure.
- Writing area at 45°, suitable for most automatic labelers.
- Air vents allowing more efficient filling with paraffin.

Cassettes for tissues. Swingsette

Designed to hold tissue specimens.
64 holes of approximately 0.76 x 5.06 mm;
distributed 16 x 4.

code	colour	case quantity	case weight	case volume
415141	white	3 x 500	5.44	0.025
415143	yellow	3 x 500	5.44	0.025
415147	green	3 x 500	5.44	0.025

Ask for minimum quantity and delivery time for other colours.

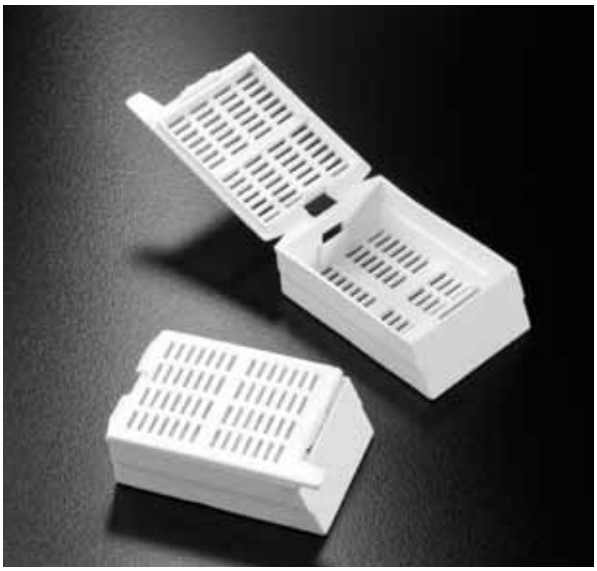


Cassettes for biopsy. Swingsette

Designed to hold biopsy specimens.
224 holes of approximately 0.76 x 0.76 mm.

code	colour	case quantity	case weight	case volume
414141	white	3 x 500	5.44	0.025
414143	yellow	3 x 500	5.44	0.025
414147	green	3 x 500	5.44	0.025

Ask for minimum quantity and delivery time for other colours.



Mega cassettes

Made from polyacetal.
With an integral lid.
Designed for larger tissue samples.
Holes are 1 x 5 mm.
Cassette dimensions: 26 x 40 x 13 mm.

code	colour	case quantity	case weight	case volume
44125	white	500	2.57	0.025

Ask for minimum quantity and delivery time for other colours.

Storage cabinet

Made of ABS. Marble color.
This storage cabinet with lid includes 5 drawers and is designed for the storage of small units such as slides or embedding rings.
Drawers are designed to hold ABS racks code **19921**.
The storage cabinet can hold a total of 5,000 slides, as each drawer can hold 10 racks and each rack can hold 100 slides.
Each slot on the rack is numbered.
Polystyrene covers for the racks are available (code **19920**).
A four wheel support (code **19931**) is also available for the cabinet.

code	description	case quantity	case weight	case volume
19930	420 x 420 x 730 mm	1	13.64	0.164
19931	4 wheels	1	0.02	0.00005
19921	cabinet rack	2	0.37	0.003
19920	cover	2	0.19	0.001

Economical storage box

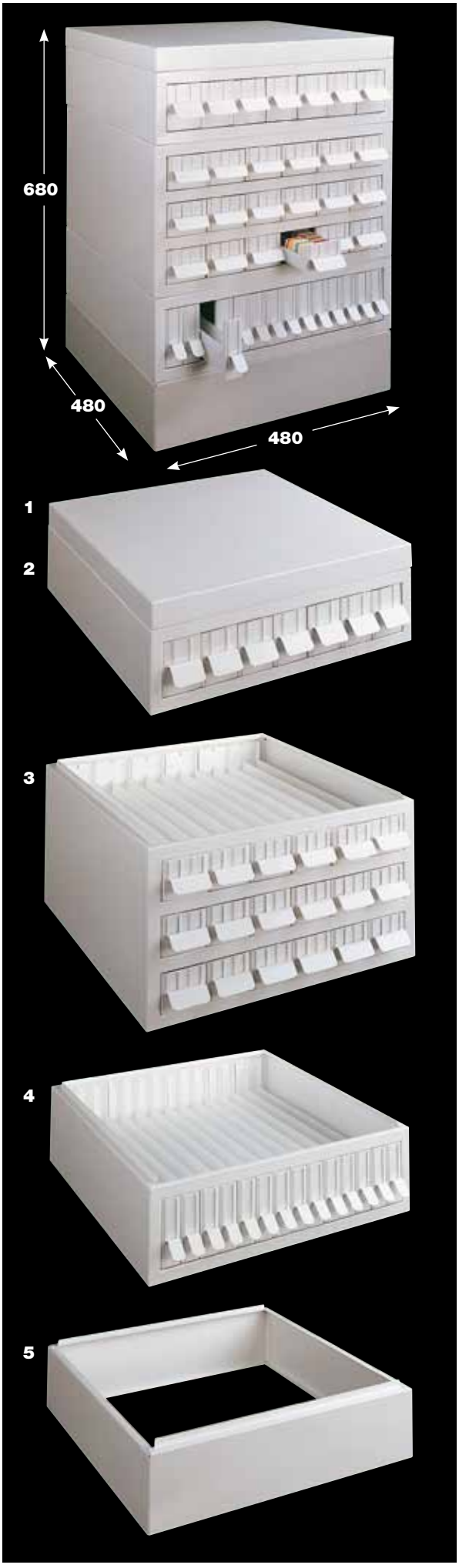
This box, complete with a lid, is specially designed for the storage of histology cassettes.
Made of heavy-duty cardboard for long term storage.
Each box stores up to 250 cassettes or 160 embedding rings.
Dimensions: 455 x 235 x 50 mm.

code	description	case quantity	case weight	case volume
DS42	waterproof cardboard	18	5.3	0.130

Modular storage drawers

Made of high impact polystyrene, this set consists of 6 stackable drawers (7 slots per drawer) providing permanent storage and identification of up to 165 embedding rings or 250 cassettes per drawer (total capacity: 1,500 cassettes).
Dimensions: 400 x 230 x 340 mm.
Front: black colour. Sides: grey.

code	description	case quantity	case weight	case volume
DS40	set of 6 drawers	1	6.14	0.037



Laboratory storage cabinet

Designed especially for the storage of microscope slides, photo slides, histology cassettes and embedding rings.
Universal models interchangeable with other cabinets on the market. All parts of the cabinet are stackable.
Manufactured from enameled metal. Colour grey.
You can make up your own composition from one or several of the following elements:

- **Modular photo slide drawers**
- **Modular cassette drawers**
- **Modular microscope slide drawers**

All modules are stackable.

Modular top (1)

code	external dimensions mm			unit weight	unit volume
	height	length	width		
DS61	50	480	480	2	0.056

Modular photo slide drawers (2)

Cabinet consisting of 7 independent drawers to hold a total of 1,700 transparencies of 50 x 60 mm.
Dimensions of a drawer: 58 x 475 mm.

code	external dimensions mm			unit weight	unit volume
	height	length	width		
DS12	120	480	480	9.54	0.056

Modular cassette drawers (3)

Cabinet consisting of 6 double drawers laid on 3 levels.
Each drawer has 2 compartments.
The cabinet can hold approximately 1800 embedding rings.
Internal dimensions of each drawer: 68 x 475 mm.

code	external dimensions mm			unit weight	unit volume
	height	length	width		
DS35	255	480	480	24.32	0.091

Modular microscope slide drawers (4)

Consisting of 14 sliding drawers to hold a total of approximately 6,500 microscope slides of 26 x 76 mm.
Internal drawer dimensions: 27x475 mm.

code	external dimensions mm			unit weight	unit volume
	height	length	width		
DS11	140	480	480	15	0.056

Modular base (5)

To fit all modular cabinets and drawers.

code	external dimensions mm			unit weight	unit volume
	height	length	width		
DS62	120	480	480	3.72	0.090

STAR FROST® ADHESIVE slides

Standard size: 26 x 76 mm. Thickness: 1 mm. Made in Germany. High definition, pre-washed glass. **Hydrofophobic**. No stain residues, no proteins in the surface.
Feature a white, 20 mm. marking area. This special printed area is resistant to all common chemicals used in the laboratories, and may be marked with pencil, ballpoint pen, marker and different laboratory-printers (e.g. Leica XPS). Thanks to the single side printing the user always knows the best surface to be used.

Star Frost® Adhesive slides are **treated with silane-coating,** which **ensures cell-and-tissue-adhesion and supports the forming of covalent bonds between the tissue and the glass** surface through electrostatic attraction. So tissue and cell substrates stick rapidly on the surface without using further adhesives or protein coating media, saving costs and time. This adhesive coating is restricted to the top surface and therefore to the usable area only. As the underside is untreated, the slides do not tend to stick when stacked or transported as with other competitive products.

StarFrost® Adhesive slides do not show striae and disturbing background staining such as the blue or red background obtained with Haematoxylin and Eosin-staining of tissues on Albumin coated glass, or the brown background obtained during the Immunoperoxidase or In-situ-DNS-Hybridisation process. They are ideal for molecular-hybridization, as being DNASe and RNAse free there is no need of washing them with chromic-acid.

Available with ground edges 90º or beveled clipped corners.
Supplied in boxes of 50 units.
Final package (20 boxes) by **tropical pack.**
Conforms with ISO 8037/1 (european standard).
Expiry date: 14 months after manufacturing date.

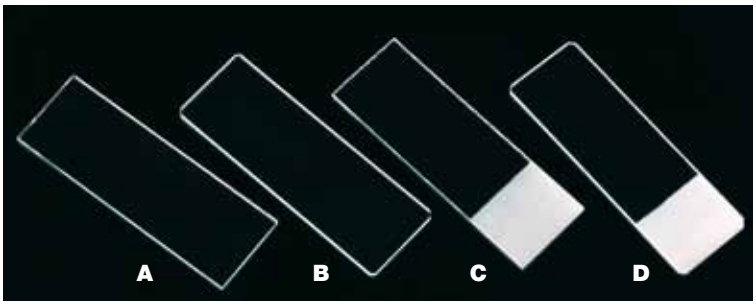
code	edges	corners	case quantity	case weight	case volume
A100018	grounded 90º	no clipped	20 x 50	4.98	0.003
A100019	grounded bevelled	clipped	20 x 50	4.98	0.003

TROPICAL PACK:
Aluminium film designed to protect slides from humidity.

STAR FROST® slides

Standard size: 26 x 76 mm. Thickness: 1 mm.
Made in Germany of high definition, pre-washed glass. Hydrofophilic (epoxy).
Feature a colour-coded, 20 mm **marking area**.
This special colour-printed area is resistant to all common chemicals used in the laboratories, and may be marked with pencil, ballpoint pen, marker and different laboratory-printers (e.g. Leica XPS). Thanks to the single side printing the user always knows the best surface to be used.
Ground edges at 45º (angle) **and clipped corners**. Supplied in boxes of 50 units. Final package (20 boxes) by tropical pack.
Expiry date: 14 months after manufacturing date.

code	strip colour	case quantity	case weight	case volume
A100010	white	20 x 50	4.98	0.003
A100011	green	20 x 50	4.98	0.003
A100013	blue	20 x 50	4.98	0.003
A100014	yellow	20 x 50	4.98	0.003



EUROTUBO® slides

Standard dimensions: 26 x 76 mm (± 0.2).
Clear, pre-washed glass, 1.1 mm (± 0.1) thick.
Ideal for routine analysis.
Displayed in cases of 50 units.
Each case is vacuum packed, easy to open, with no need for scissors.
Each case includes a bag of silica salt.
Expiry date: 15 months after manufacturing date.

	code	edges	corners	matt area	case quantity	case weight	case volume
A	**D100001**	cut 90º	no clipped	no	50 x 50	14.25	0.013
B	**D100002**	grounded 45º	clipped	no	50 x 50	14.20	0.010
C	**D100003**	cut 90º	no clipped	yes	50 x 50	14.20	0.010
D	**D100004**	grounded 45º	clipped	yes	50 x 50	14.25	0.013

EUROTUBO® cover slides

Specific use: protection of the sample and lens.
Clear, pre-washed glass. Thickness: No 1: 0.13 x 0.16 mm.
Supplied in cases of a hundred or two hundred units (depending on the code).
Each case includes a bag of silica salt, and is supplied vacuum in tropical pack. Easy opening, no need for scissors.

code	dimensions mm	case quantity	case weight	case volume
D101818	18 x 18	5 x 200	0.52	0.0016
D102020	20 x 20	5 x 200	0.71	0.0016
D102222	22 x 22	5 x 200	0.65	0.0016
D102240	22 x 40	10 x 100	0.63	0.0016
D102424	24 x 24	5 x 200	0.72	0.0016
D102432	24 x 32	10 x 100	0.61	0.0016
D102440	24 x 40	10 x 100	0.65	0.0016
D102450	24 x 50	10 x 100	0.70	0.0016
D102460	24 x 60	10 x 100	0.61	0.0016

Microscope slide labels 23 x 23 mm

Write on these permanent adhesion labels and stick them onto microscope slides for better identification.
White colour.
Each sheet contains 40 labels.
Page size: 13.3 x 19 cm.

code	quantity	weight	volume
901600	1,000 labels	2.5	0.020

Mounting medium for microscopy

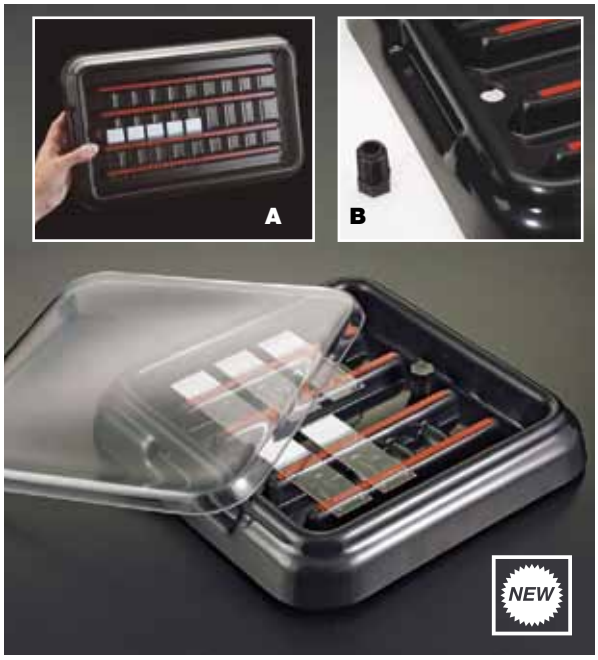
VITROCLUD® quick-hardening mounting medium for microscope preparations.
Neutral and colourless.
Short hardening time (20 min). Refractive index at room temperature: 1.5.
Resistant to heat, cold (down to –17 °C), humidity and light including UV rays.
It is recommended to close the container immediately after use.
If the medium becomes too viscous, add Xylene.
Supplied in aluminium bottles for a safer storage.
Store at maximum 20 °C.

code	description	case quantity	case weight	case volume
A20100	bottle 100 ml	1	0.12	0.001
A20250	bottle 250 ml	1	0.27	0.001
A20500	bottle 500 ml	1	0.54	0.002

Staining tray

Made of ABS.
It will accept 10 or 20 slides on plastic rails covered by a polymer strip to perfectly hold slides even if tray is held at an angle (see picture A).
When humidity is required, wells between rails may hold water, and raised rails will avoid water from touching the slides.
It features a draining plug to ease the emptying of the tray (see picture B).
Four rubber feet ensure stability.
Clear lid made of PETG (also available in black ABS, for fluorescence work; ask for delivery time).
Cannot be used with acetone and chlorinated hydrocarbons.

code	description	case quantity	case weight	case volume
989953	staining tray 10 slides	1	0.65	0.003
989951	staining tray 20 slides	1	1.08	0.005



Stains

	code	description	case quantity	case weight	case volume
CE (IVD)	808000	Eosin, solution, May Grunwald, 250 ml bottle Danger symbols: R11-23/24/25-39/23/24/25. S 7-16-36/37-45 Transport norms: UN: 1992. ADR: 3/19b.IMDG: 3.2/II. IATA: 3/II. PAX: 305. CAO: 307	48	14.40	0.045
CE (IVD)	808001	Eosin, solution, May Grunwald, 1000 ml bottle Danger symbols: R11-23/24/25-39/23/24/25. S 7-16-36/37-45 Transport norms: UN: 1992. ADR: 3/19b.IMDG: 3.2/II. IATA: 3/II. PAX: 305. CAO: 307	12	13.00	0.045
CE (IVD)	808100	Eosin, solution modified Giemsa, 250 ml bottle Danger symbols: R11-23/24/25-39/23/24/25. S 7-16-36/37-45 Transport norms: UN: 1992. ADR: 3/19b.IMDG: 3.2/II. IATA: 3/II. PAX: 305. CAO: 307	48	15.50	0.015
CE (IVD)	808101	Eosin, solution modified Giemsa,1000 ml bottle Danger symbols: R11-23/24/25-39/23/24/25. S 7-16-36/37-45 Transport norms: UN: 1992. ADR: 3/19b.IMDG: 3.2/II. IATA: 3/II. PAX: 305. CAO: 307	12	13	0.045
CE (IVD)	808200	Eosin, solution Wright, 250 ml bottle Danger symbols: R11-23/24/25-39/23/24/25. S 7-16-36/37-45 Transport norms: UN: 1992. ADR: 3/19b.IMDG: 3.2/II. IATA: 3/II PAX: 305. CAO: 307	48	13.30	0.045
Gram differential staining **KIT**: **805000***	806030	Lugol bottle 250 ml	48	14.7	0.045
	805040	Violet crystal bottle 250 ml	48	14.4	0.045
	805001	Gram decolorizing bottle 250 ml	48	12.8	0.045
	805050	Safranin bottle 250 ml	48	14.4	0.045
	805001	Gram decolorzing, 250 ml bottle. Danger symbols: R-11-36-66-67. S 9-16-26 Transport norms: UN: 1993 ADR: 3/3b. IMDG: 3,2/II. IATA: 3/II PAX: 305. CAO: 307	16	4.12	0.014
	806030	Lugol Iodine, 250 ml bottle. Danger symbols: R52	16	4.76	0.014
	805040	Violet crystal solution (Gentian violet), 250 ml bottle Danger symbols: R-21/22-36/38. S 28a Transport norms: UN: 2810 ADR: 6/25c. IMDG: 6.1/III. IATA 6.1/III. PAX: 611. CAO: 608	16	4.68	0.014
	805140	Violet crystal solution (Gentian violet), 1000 ml bottle Danger symbols: R-21/22-36/38. S 28a Transport norms: UN: 2810 ADR: 6/25c. IMDG: 6.1/III. IATA 6.1/III. PAX: 611. CAO: 618	12	13.00	0.045
Ziehl differential staining **KIT**: **805010***	805020	Fuchsin bottle 250 ml	16	14	0.045
	805030	Methylene blue bottle 250 ml	48	14.40	0.045
	805011	Ziehl decolorizing 2 bottles 250 ml	48	13.40	0.045
	805011	Ziehl decolorizing, 250 ml bottle Danger symbols: R-11-36/37/38 S 7-16-26-45 Transport norms: UN: 2924 ADR: 3/26b. IMDG: 3,2/II. IATA: 3/II PAX: 305. CAO: 307	16	3.39	0.014
	805050	Safranin solution, 250 ml bottle	16	4.64	0.014
	805150	Safranin solution, 1000 ml bottle	12	13.00	0.045
	805120	Ziehl fuchsin solution, 1000 ml bottle Danger symbols: R10-21/22-36/38. S 36/37.	12	13.00	0.045
	805030	Methylene blue, 250 ml bottle	16	4.70	0.014
	805130	Methylene blue, 1,000 ml bottle	12	13.00	0.045
CE (IVD)	805013	Fast stain for blood extensions, 250 ml containers, **Kit** with 2 containers A and 2 containers stain B	12 Kits	14.95	0.045

*Please order the KITS **805000** and **805010** only for **ground shipping**. For **maritime shipping** orders, please order individual codes.

Minimum order quantity: 1 bottle or kit.

Staining jars with lid

Material: **autoclavable TPX.**
Two options available: vertical, “Hellendhall” type (Code **19335**) horizontal “Schifferdecker” type (Code **19351**).

code	description	case quantity	dimensions mm	case weight	case volume
19355	vertical, for 8 slides	4	58 x 53.5 x 86	0.27	0.001
19351	horizontal, for 10 slides	4	76 x 65 x 45	0.32	0.001

Staining jar

Made of **POM** (polyoxymethylene).
Colour: black. Ideal for slide staining.
Good resistance to alcohols and xylol (not to phenol).
Consists of a jar with a lid for slide staining.
Leakproof. Includes a white perforated slide partition for drying.
Not suitable for microwaves.

code	dimensions mm	case quantity	case weight	case volume
191101	100 x 87 x 51	1	0.08	0.004

Staining rack

Made of **POM** (polyoxymethylene). Colour: black. Ideal for slide staining.
Good resistance to alcohols and xylol (not to phenol). Accepts 25 slides.
Includes a folding handle, and 25 numbered slots to facilitate classification.
Slides insert easily in the rack. The rack ideally fits into the staining through presented above.
No suitable for microwaves.

code	dimensions mm	case quantity	case weight	case volume
191100	91 x 79 x 38	1	0.03	0.001

Staining system

Slide staining system compound of a range of jars, and a 12 slides staining rack. Different jar colours allow the user to distinguish each stage of the staining process. Jar and rack made of **autoclavable** POM (polyoxymethylene), resistant to staining agents as alcohol, xylene, etc. (not phenol).
The jar embodies a hinged lid which allows storing the jar with the content.
Reagent capacity: 80 ml.
Jars can be loosely joined to each other laterally (picture 1).
The rack features a handle in the hinged lid, and can be placed up when handled out of the jar. Since the slides are placed vertically in the rack, their writing area will not be stained, allowing their removal without the use of forceps (picture 2).
Rack and jar withstand from **–170 °C** and **121 °C.**
Jar dimensions: 64 x 76 x 92 mm. Rack dimensions: 60 x 64 x 97 mm.

code	description	case quantity	case weight	case volume
191104	blue jar	6	0.72	0.0059
191105	green jar	6	0.72	0.0059
191106	white jar	6	0.72	0.0059
191107	yellow jar	6	0.72	0.0059
191108	dark grey rack	6	0.32	0.0024

Staining jar and dish

Dish made of polypropylene and jar made of **autoclavable TPX**. The jar is supplied with two lids. The first lid provides evaporation free storage of staining liquid when the dish is not in use. The second includes a slot to allow staining dish insertion.
Code **19353**: height (with lid) 70 mm, height (without lid) 65 mm, lenght 100 mm and width 75 mm.
Code **19354**: height 21 mm, length 83 mm, width 70 mm and lenght (handle) 160 mm.

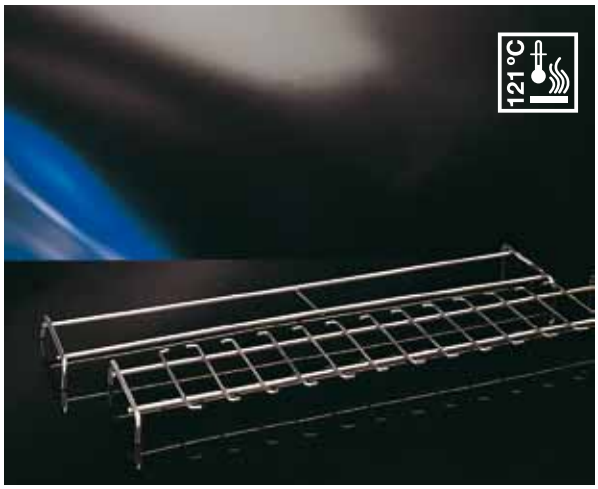
code	description	case quantity	case weight	case volume
19353	jar with 2 lids	4	0.42	0.006
19354	staining dish for 20 slides	2	0.06	0.001

Staining racks

Stainless steel.
Models **S-004** and **S-002** can be leaning over to drain off the stain without falling the slide.

code	description	case quantity	case weight	case volume
S-004	for 12 slides length: 435 mm, width: 85 mm	1	0.24	0.003
S-002	for 24 slides lenght: 435 mm, width: 175 mm	1	0.34	0.003
S-003	without dividers lenght: 435 mm, width: 85 mm	1	0.19	0.003

Other stainless steel models can be made on request.



Staining jar and basket

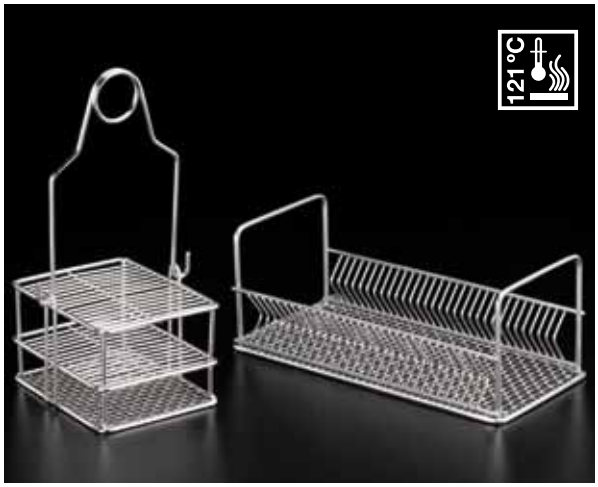
Code **19360** is a stainless steel staining jar.
With a lid to avoid evaporation.
Made of stainless steel, this staining basket is designed for 30 slides of 26 x 76 mm for use in the above staining jar, code **19360**.
Includes an adjustable handle for more convenience.

code	description	dimensions mm	case quantity	case weight	case volume
19360	jar	115 x 88 x 77	1	0.42	0.001
19361	basket	110 x 85 x 55	1	0.13	0.001

Special baskets and trays for slides

Baskets are manufactured from stainless steel wire. Cuvettes are made of neutral glass and feature stainless steel lids.
Models **CP-24, CP-30, CP-50** have folding handles.

code	description	dimensions mm	case quantity	case weight	case volume
CP-30 H	basket for 30 horizontal slides	172 x 86	1	0.111	0.0010
CP-45 H	basket for 45 horizontal slides	235 x 85	1	0.159	0.0016
CP-30	basket for 30 vertical slides	70 x 90	1	0.10	0.0025



Coplin type staining jar

Jar made of opaque white, unbreakable and **autoclavable** polypropylene, designed for staining 5 standard microscope slides.
Rectangular container with rounded base and screw ribbed flat cap with an inner ring for preventing leakage.
Used as a storage system, it can hold up to 10 slides (2 per groove).
Dimensions: Base diameter: 60 mm.
Height of jar: 110 mm.
Height of jar with cap: 114 mm.

code	description	case quantity	case weight	case volume
191087	Coplin jar for 5 slides	12	0.80	0.006

Slidefolder

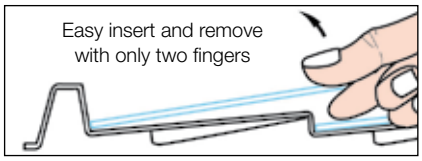
Made of hight impact polystyrene. It will hold up to twenty standard slides.
The case holding the slides horizontally offers numbered spaces for easy identification.
Will resist temperatures between **–80 °C** and **100 °C**.
Not autoclavable.
The two transparent doors cover the slides and offer a full view of each slide without having to remove them.
Easy opening.
Stackable.
External dimensions: 192 x 292 x 11 mm.

code	slidefolder colour	case quantity	case weight	case volume
989945	blue	10	3.20	0.013

Slide tray

Made of high impact polystyrene. It will hold up to twenty standard slides. The slide tray is easily stackable and will take minimum space on any shelf or laboratory counter.
Not autoclavable.
External dimensions: 206 x 299 x 18 mm.

code	slidefolder colour	case quantity	case weight	case volume
989956	white	10	0.91	0.013



See our slides on pages 96-97

Slide trays

Material: polystyrene.
Stackable.

code	description	dimensions mm	case quantity	case weight	case volume
989910	slide tray for 10 slides	95x330x50	40	2.50	0.015
989920	slide tray for 20 slides	195x330x50	20	2.44	0.015

Slide mailer

Made of polypropylene.
Designed for slide transport and protection.
To send by mail we recommend to use special envelopes.
Compartment shape ensures tight fit: no risk of damaging slides.
Easy snap-lock. but not indicated for liquid samples.

mod.	code	slide capacity	dimensions mm	case quantity	case weight	case volume
1	**19923**	1	80 x 40 x 6	50	0.31	0.009
2	**900025**	2	87 x 47 x 16	100	1.30	0.009
3	**979930**	2	84 x 71 x 6	250	3.98	0.010
4	**19924**	3	84 x 99 x 6	10	0.29	0.0009
5	**900028**	5	82 x 17 x 29	100	1.02	0.012

Slide tube mailer

Tube in polypropilene for mailing, staining and storing of 4 standard slides.
Leakproof cap made of high density polyethylene in pink colour.
Incorporates a **tamper evident locking mechanism** that can be activated whenever user decides.
The cap has one space to insert a colour disc as identification (**40911A**, chapter 6. Tubes and microtubes).
Being transparent helps the user to notice if there are slides in it, an advantage in front of the popular white transparent tubes.
Internal volume: 12 ml.
Dimensions: 35 x 87 mm.

code	description	case quantity	case weight	case volume
19926	tamper evident tube	100	1.90	0.017

Slide storage boxes

Manufactured in ABS, beige or blue colour. Economical boxes to store or transport 25, 50 or 100 slides.
Safe closing and easy opening.
They include numbered sheets with a labeling space in the bottom of the case and in the inner side of the cover (excepting model 1, which does not include the one in the inner side of the cover).
Models 2 and 3 have a special modeling assuring a good stability when stacked.

mod.	code	slide capacity	minimum order quantity	dimensions mm	case quantity	case weight	case volume
1	**19276.B**	beige slide box for 25 slides	5	93 x 87 x 32	200	10.61	0.07
	19276.A	blue slide box for 25 slides	5	93 x 87 x 32	200	10.61	0.07
2	**19277.B**	beige slide box for 50 slides	2	200 x 89 x 32	100	11.28	0.07
	19277.A	blue slide box for 50 slides	2	200 x 89 x 32	100	11.28	0.07
3	**19278.B**	beige slide box for 100 slides	5	200 x 170 x 32	50	11.85	0.07
	19278.A	blue slide box for 100 slides	5	200 x 170 x 32	50	11.85	0.07

Cylindrical slide mailer

Polypropylene. Ideal for storing and transporting 5 to 10 slides in complete safety.
The deep threaded container provides a leakproof seal for transport.

code	description	case quantity	case weight	case volume
19922	for 10 slides	10	0.32	0.0028

Slide storage boxes

Manufactured in polystyrene for 100 slides.
Capacity can be doubled if two slides are placed into the same cell. The internal cork lining prevents damage to stored slides.
To ensure proper slide identification, each slot is numbered to correspond to the slide inventory sheet on the inside cover of the box. Stackable.
This model feature has a safety closure.
Dimensions: 208 x 162 x 32.

code	description	case quantity	case weight	case volume
19278.2	red, for 100 slides	1	0.30	0.002
19278.3	white, for 100 slides	1	0.30	0.002

Microscope slide boxes

Made of high impact polystyrene, those boxes are designed for slides. Each slot is numbered and can be cross-referenced with the corresponding index card supplied with each box.
Boxes are virtually unbreakable. Stackable.
Dimensions mm: 98 x 83 x 38 (25 slides), 230 x 97 x 35 (50 slides), 230 x 180 x 35 (100 slides).

code	description	case quantity	case weight	case volume
19276	for 25 slides	4	0.35	0.002
19277	for 50 slides	1	0.23	0.001
19278	for 100 slides	1	0.39	0.003

Slide boxes

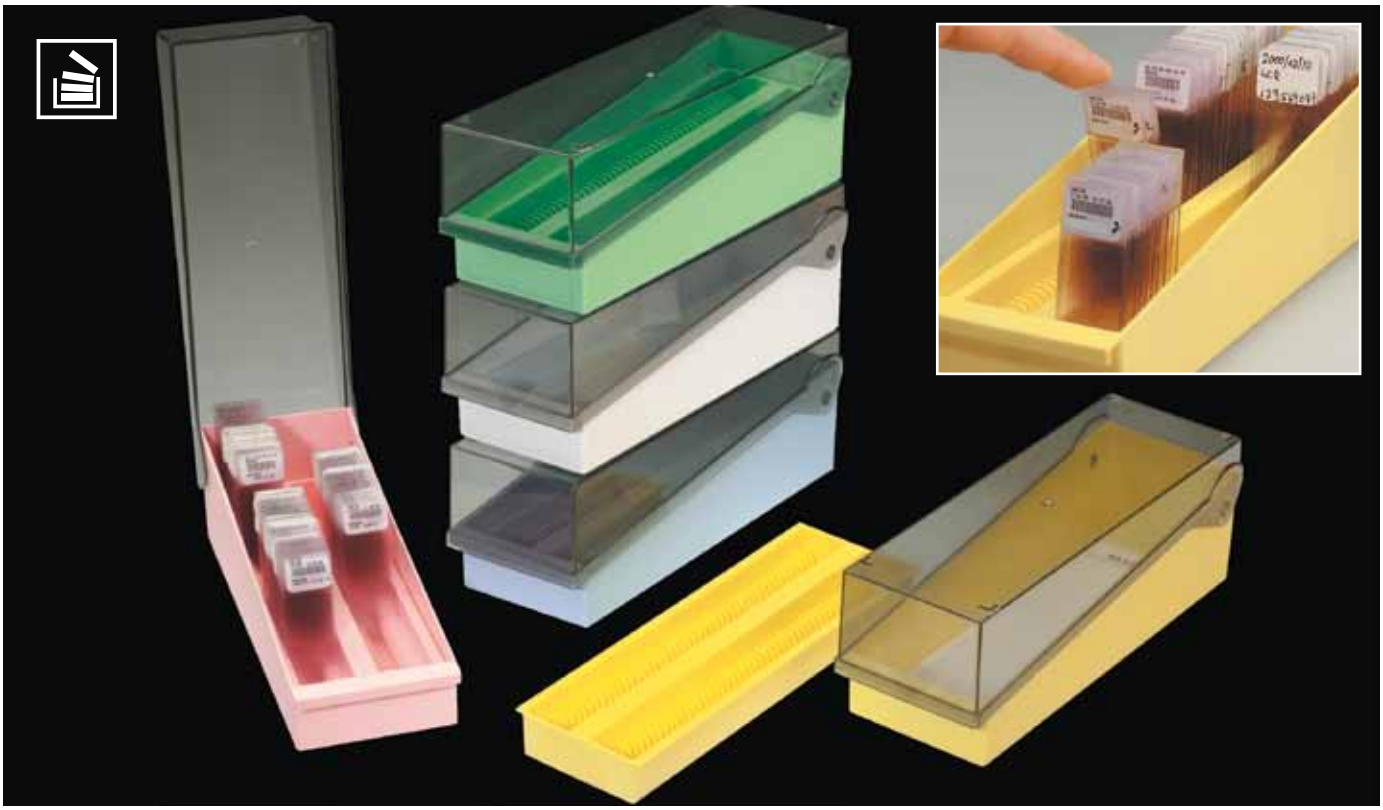
Plain polyethylene slide box with clear polypropylene lid.
Not numbered.
Stackable.
Dimensions in mm: 105 x 88 x 32 (25 slides), 200 x 88 x 32 (50 slides)

code	description	case quantity	case weight	case volume
19276.1	for 25 slides	48	3.56	0.019
19277.1	for 50 slides	24	3.40	0.018

Automatic slide dispenser

Made of ABS and PS, this dispenser can hold up to 50 standard slides.Slides are dispensed individually by rotating the knurled knob on either side of the moulded base.

code	description	case quantity	case weight	case volume
19540	for 50 slides 26 x 76 mm	1	0.20	0.002



Slide storage system for 100 slides. Stackable

Made of high impact polystyrene. It can hold up to 200 standard slides.
Compound by a box with a transparent lid with an easy opening and an internal removable rack.
This removable rack is divided into two parts with 50 numbered slots in each one, so 100 slides can be separately placed and their strips can be read. For space saving purposes, you can double the amount of slides simply by storing 2 slides per slot, so each part can hold up to 100 slides resulting in a total capacity of 200 slides.
They can also be used without the internal rack, so the capacity reaches 400 slides.
Stackable. The internal rack allows discarding all the slides at the same time.
The frontal part of the box can be written.
External dimensions: 82 x 245 x 86 mm.

code	colour	case quantity	case weight	case volume
19279.5	blue	10	3.3	0.023
19279.7	green	10	3.3	0.023
19279.3	yellow	10	3.3	0.023

See minimum and delivery time for other colors.

Slide storage system for 50 slides. Stackable

Same characteristics as previous codes, it has half capacity. Each part of the inner rack can hold up to 25 separate slides with a total capacity of 50 slides, or for space saving purposes it has a total capacity of 100 slides by storing 2 slides in each slot.
External **dimensions**: 82 x 140 x 86 mm.

code	colour	case quantity	case weight	case volume
19274.5	blue	10	1.5	0.013
19274.7	green	10	1.5	0.013

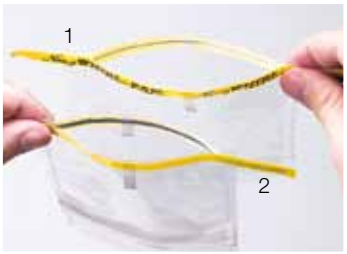
Minimum order quantity: 1 storage system.

Whirl-Pak® bags with flat wires

Same features as those from the following page but with a flat thicker wire instead of rounded wire resulting in a safer closure, which is preferred in some markets.
With white write-on strip.
Steriles by ethylene oxide.

code	capacity ml	dimensions cm	thickness microns	case quantity	case weight	case volume
200356	540	11.5 x 23	64	500	2.18	0.0074

1. Rounded wire
2. Flat thicker wire



Whirl-Pak® stand-up bags

Same characteristics as Whirl-Pak® standard bags. However, they have a flat bottom which permits them to remain stand up when the sample is inside the bag.
This allows to have both hands free when working so you can add or to extract the content comfortably. No need of any rack.
Working as a beaker or bottle, when they are empty they take up much less space.
They have a write-on white strip.
Steriles by ethylene oxide.

code	capacity ml	dimensions cm	thickness microns	case quantity	case weight	case volume
200361	540	11.5 x 23	64	500	2.50	0.017
200365	2,070	19 x 38	102	250	4.52	0.019

1. Tear off top of bag along perforation.
2. Use pull tabs to open bag.
3. Place sample in bag.
4a. Hold bag by wire ends and whirl three times to close.
4b. Or, fold the tab over tightly three times to close (used to close larger bags).
5. Bend wire ends onto bag.

Sterile Whirl-Pak® sample bags

Made of a low density polyethylene blend, resulting in a very resistant and transparent bags.
Suitable for both solid and liquid samples. The plastic thickness depends on the model (57 to 102 µ).
This special polyethylene blend makes unnecessary a higher thickness to achieve higher resistance.
Leakproof closure by several metallic rounded sticks when you turn closure bands three times (see scheme).
The Whirl-Pak® bags are the unique bags with a one-piece seam, avoiding the possible risks of the loss of the corners bags.
Steriles by ethylene oxide.
Made with materials suitables for alimentary use.
Suitable for liquid nitrogen.

Without strips

code	capacity ml	dimensions cm	thickness microns	case quantity	case weight	case volume
200325	60	7.5 x 12.5	57	500	0.84	0.0048
200340	120	7.5 x 18.5	57	500	1.06	0.0052
200341	210	9.5 x 18	76	500	1.50	0.0053
200342	390	13 x 19	76	500	2.50	0.0170
200329	540	11.5 x 23	64	500	2.04	0.0074
200332	720	15 x 23	76	500	2.94	0.017
200343	720	15 x 23	102	500	3.88	0.017
200345	1,080	12.5 x 38	76	500	3.90	0.017
200346	1,260	15 x 38	76	500	3.92	0.017
200347	2,070	19 x 38	76	500	5.62	0.017

Avec bande blanche pour identification

code	capacité ml	dimensions cm	épaisseur micron	quantité par carton	poids du carton	volume du carton
200326	60	7,5 x 12,5	57	500	0,78	0,0048
200349	120	7,5 x 18,5	57	500	1,02	0,0054
200364	390	13 x 19	64	500	2,02	0,017
200330	540	11,5 x 23	64	500	1,66	0,0071
200333	720	15 x 23	76	500	3,06	0,0170
200351	1.650	19 x 30	102	500	5,66	0,0182
200363	2.070	19 x 38	76	500	5,54	0,019
200357	2.700	25,4 x 38	102	250	5,32	0,022
200358	3.600	25,4 x 50,8	102	250	6,46	0,022
200359	5.400	38 x 50,8	102	100	4,68	0,022

La capacité des sachets a été calculée quand le sachet est fermé en pliant les tiges de fermeture métallique 3 fois. Les volumes sont approximatifs. Pas utiliser à une température supérieure à 82 ºC.
Ils ne sont pas autoclavables.

See blender bags in Chapter 1. **Microbiology**

Zip-lock bags

Made of transparent polyethylene, very resistant to shocks and tearing. For all solid samples.
Suitable for laboratories (for tubes, swabs, etc.) as well as industries (to contain, spare pieces, small electronic components, buttons, sweets, etc.).

code	gauge	dimensions mm	case quantity	case weight	case volume
M 5555	200	55 x 55	2,000	1.13	0.0028
M 6080	200	60 x 80	2,000	1.35	0.0046
M 70100	200	70 x 100	2,000	1.57	0.0046
M 80120	200	80 x 120	2,000	2.54	0.0051
M 80160	200	80 x 160	2,000	2.80	0.0077
M 100150	200	100 x 150	2,000	3.90	0.0080
M 110110	200	110 x 110	2,000	2.90	0.0080
M 120180	200	120 x 180	2,000	4.56	0.0125
M 150220	200	150 x 220	2,000	6.87	0.0180
M 180250	200	180 x 250	2,000	9.16	0.0230
M 200300	200	200 x 300	2,000	13.94	0.0220
M 250330	200	250 x 330	2,000	16.66	0.0340
M 300400	200	300 x 400	2,000	23.10	0.0500

White strip zip-lock bags

Same features as the above products.
Feature white strip for writing for better sample identification.

code	gauge	dimensions mm	case quantity	case weight	case volume
M 5555B	200	55 x 55	2,000	1.13	0.0028
M 6080B	200	60 x 80	1,000	0.67	0.0026
M 80120B	200	80 x 120	1,000	1.27	0.0037
M 70110B	200	70 x 110	1,000	0.95	0.0037
M 100150B	200	100 x 150	1,000	1.59	0.0044
M 120180B	200	120 x 180	1,000	2.35	0.0065
M 160220B	200	160 x 220	1,000	4.32	0.0080
M 180250B	200	180 x 250	1,000	4.43	0.0125
M 200300B	200	200 x 300	1,000	6.82	0.0145

Specimen transport kangaroo bags

For tube transport. Double pouch design: one for specimen tubes and the other for documents. Includes a safety seal.
Reclosable (zip-lock design). Dimensions: 16x16.5 cm.
Made of polyethylene.

code	colour	case quantity	cases weight	case volume
V 160230	green	2 x 1,000	11.66	0.03
N 160230	orange	2 x 1,000	11.66	0.03

See blender bags in Chapter 1. **Microbiology**

Whirl-Pak® specimen transport kangaroo bag

Non-sterile bag made of a low density polyethylene blend, resulting in a **very resistant and transparent bag.**
Designed for both solid and liquid samples.
Leakproof closure with several metallic rounded sticks.
Double pouch design: one for specimen tubes and the other one for documents.
It features the biohazard symbol.
Bag with a **one-piece seam**, avoiding the possible risks of the loss of the corners bags. **Suitable for liquid nitrogen**.

code	capacity ml	dimensions cm	thickness microns	case quantity	case weight	case volume
200372	720	15 x 23	64	500	3.38	0.0170

Mailing container

Mailing container with safety screw blue cap, both manufactured in polyethylene. Leak proof.
Dimensions uncapped 128 x 30 mm. Ideal for 10 ml tubes. The tube includes a piece of absorbent paper to prevent from any leakage.
Container and cap are sold separately.

code	description	case quantity	case weight	case volume
401301	mailing container	500	7.70	0.09
401302	screw cap	500	1.90	0.009

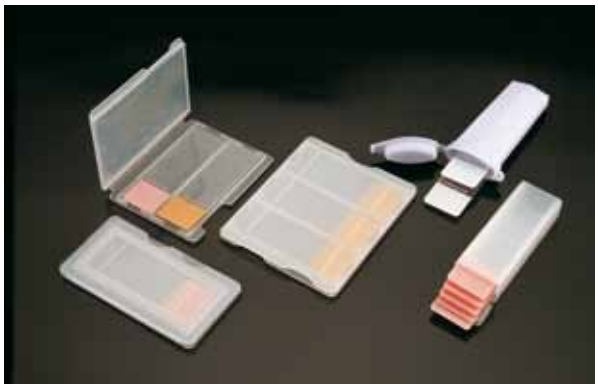
Forceps

Made of **POM** (polyoxymethylene).
Colour: orange.
Self-sprung forceps with rounded ends.
Code **19503**, the inner part of the tip is ribbed to enhance sampling. Ribbed for a better handling.
Autoclavable. Flexible.

code	length mm	case quantity	case weight	case volume
19500	115	5	0.23	0.0006
19501	145	5	0.05	0.0005
19503	250	5	0.17	0.004

Slide mailers

Designed for slide transport and mailing.
Different models (tube, case, etc.) for one, two, three, four or even ten slides.



See more information in
Chapter 4. **Histology, microscopy and staining**

Containers for sampling

Polystyrene or polypropylene containers.
Volumes from 30 ml to 1,000 ml.

See more information in
Chapter 7. **Sample Containers**

Exam gloves

CE (EPI) CE (MDD)

Wide range of single use gloves **AQL 1.5.**

Different options available:
- Powdered and non powdered latex.
- Powdered and non powdered vinyl.
- Non powdered nitrile.

See more information in
Chapter 11. **Safety and general labware**

Swabs for microbiological sampling

CE (MDD)

Sterile swabs with or without transport media.
Tips made of viscose, cotton, dacron®, etc.
Supplied in tube, peel pack, flow-pack, etc.
Transport media available:
- Amies with and without charcoal
- Stuart
- Cary Blair
- Virus
- Chlamydia

See more information in
Chapter 1. **Microbiology**

Autoclave resistant bags

Printed with the biohazard symbol and instructions of use.
Two versions available:
- Transparent and translucent, suitable for routine autoclaving.
- Red color, suitable for **autoclaving at 138 ºC**; they feature a sterilization indicator.

See more information in
Chapter 11. **Safety and general labware**

Cytology brush

CE (MDD)

Blue ABS shaft. For cervical specimen collection, designed for taking cell samples without damaging them.
Includes a soft tip to provide more comfort for patients.
Total length: 19.5 cm.
Sterile model is sterilised by ethylene oxide and includes instructions.

code	description		case quantity	case weight	case volume
440150		non sterile	50 x 50	4.55	0.009
440151	STERILE EO	individual peel-pack	2 x 500	3.90	0.029

Vaginal speculum

CE (MDD)

Manufactured in transparent polystyrene. Handle design that allows one-handed quick and convenient manner. Zip system for opening and closing. Aseptic. Rounded edges and ergonomically designed for single-handed use. Free of heavy materials as CE/94/62 directive.
Packaged individually with a peel-pack that facilitates the traceability and also indicates expiration date.
Available in 3 differents sizes.

code	shaft width mm	case quantity	case weight	case volume
440157	20	100	3.90	0.060
440158	30	100	4.22	0.060
440159	32	100	4.62	0.060

AYRE wood spatula

CE (MDD)

Rounded edges.
Sterile model is sterilised by ethylene oxide and includes instructions.

code	description		case quantity	case weight	case volume
440142.0		non sterile	50 x 100	10.50	0.027
444150	STERILE EO	individual peel-pack	2 x 500	5.10	0.029

AYRE plastic spatula

CE (MDD)

Made of **autoclavable** polypropylene.
Rounded edges.
Sterile model is sterilised by ethylene oxide and include instructions.

code	description		case quantity	case weight	case volume
440142		non sterile	5 x 500	7.0	0.025
444142	STERILE EO	individual peel-pack	2 x 500	4.6	0.029
444242	STERILE R	individual flow-pack	2 x 500	4.9	0.029

Minimum ordening quantity: 500

Isothermal bags

Isothermal bags for the transport of biological samples, manufactured from PVC, PE and polyurethane (foam). The isothermal bags have two functions: keeping the temperature of samples for 6 hours while being transported, whatever the climatic conditions; protecting the samples and their contents. Available in green.

Description: for added security, isothermal bags feature three different locks: by velcro (excepting 6 l model), by zip fastener and by a coded padlock.

Bags include the following elements:

- An inner pocket designed to hold the cold packs,
- A transparent outer pocket, at the front of the bag, for laboratory identification,
- A transparent pocket, over the top of the bag, to insert documents.
- Two cold packs (except **900073** which incorporates only 1) consisting of HDPE packs filled with a non toxic gel.

Before use, place cold packs in the freezer and keep at –20 ºC/–24 ºC for 24 hours.

Quality features:

- Bags manufactured from sturdy and shockproof materials.
- Stand out from other isothermal bags existing on the market for their lightness and convenience.
- Offer a total security seal thanks to padlock.
- Space-saving and supplied folded in to reduce volume by 50 %.
- To clean, simply use standard detergents.
- Corners are rounded and reinforced by a double seam. Handles are sewn all around the bag for increased strength.
- Isothermal bags are traditionally manufactured (non-automated production), and each product undergoes rigid quality controls.

code	dimensions mm	capacity	case quantity	case weight	case volume
900073	230x230x170	6	1	0.62	0.003
900074	220x220x260	10	1	1.10	0.010
900076	390x250x280	27	1	1.33	0.011
900078	450x300x300	40	1	1.46	0.014

Bottles for water sampling

Sterile bottles, designed according to ISO standards for sampling of consumption water.
Available with thiosulfate (microbiological analysis) and without thiosulfate (physico-chemical analysis).

Bottles are available in polyethylene or PET.
Capacities vary from 500 to 1,500 ml.

Special configurations:

- Personalized labels,
- Individually bagged bottles,
- Special dosifications of thiosulfate,
- Other bottles or jars from the catalogue, etc.

See more information in Chapter 1. **Microbiology**

Squared containers, graduated up to 2.7 litres

CE (IVD)

High density polyethylene container and cap. Ideal for 24 hour urine collection and other liquid samples.
The ribbed cap features a pharmaceutical grade liner, which eliminates the need for an insert plug, allows a better handling and provides a watertight seal.
Containers are graduated in 50 ml increments up to 2.7 l.
Ergonomically designed for single-handed use. Stackable.
A ring on the neck of the containers avoids dripping when pouring.
Lenght x width: 130 x 126 mm (± 1 mm).
Height, cap excluded: 249 mm.
Individually wrapped models are supplied capped.
Cases per palet: 12.

code	body colour	cap description	presentation	individually wrapped	sterile	internal mouth Ø mm	case quantity	case weight	case volume
407005	natural	white, with liner	unscrewed	no	no	64	34	5.70	0.152
407005/T	natural	white, with liner	screwed	no	no	64	34	5.70	0.152
407005.O	natural	white, with liner	screwed	yes	RADIATION	64	34	5.70	0.152
407006	brown	white, with liner	unscrewed	no	no	64	34	5.70	0.152
407006/T	brown	white, with liner	screwed	no	no	64	34	5.70	0.152

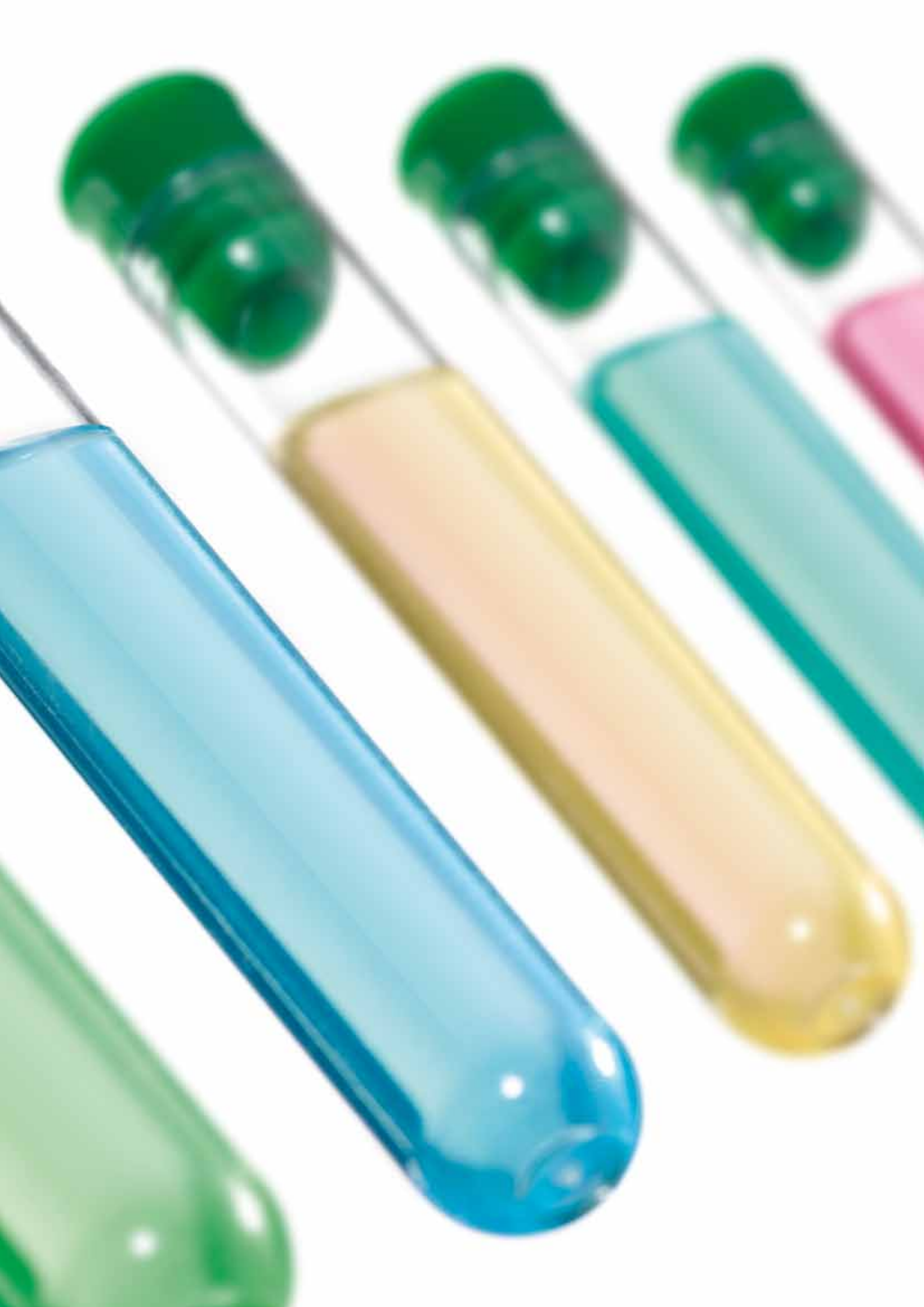
5 and 10 ml freestanding, conical bottom tubes

Freestanding tubes with screw caps. Conceived for sampling, transport and midterm storage. Feature molded graduations at 1mL increments and a large surface for labeling and identification. Round bottom tubes made of **autoclavable** polypropylene, leakproof caps made of polyethylene.
Withstand temperatures between **122 °C and –80 °C** (**–40 °C** as the lowest working temperature).
Certified to the **IATA 95kPA** standard for safe shipping of samples.

code	description	case quantity	case weight	case volume
439905	5 ml PP thread tube	2 x 500	5.45	0.032
439910	10 ml PP thread tube	2 x 500	6.35	0.055

Dimensions (±0,5):

code	external cap Ø mm	internal tube Ø mm	length with cap mm	length without cap mm
439905	15.8	14.17	60.20	58.62
439910	15.8	14.17	94.74	92.96



Round bottom polystyrene tubes

CE (IVD)

Manufactured from high technology, new generation moulds to ensure the reproducibility of each tube.
Tubes are made in one piece to ensure uniformity and dimensional accuracy from tube to tube.

mod.	code	dimensions mm	volume ml	case quantity	case weight	case volume	cases per pallet
1	**300500**	11 x 55	3	2 x 2,000	7.50	0.046	32
2	**300300**	11 x 70	4	3 x 1,000	6.20	0.046	32
3	**300800**	12 x 75	5	4 x 1,000	9.30	0.075	20
4	**300800.2**	12 x 75 thick wall	5	4 x 1,000	10.70	0.075	20
5	**300800.1**	12 x 75	5	4 x 1,000	9.60	0.075	20
6	**300400**	12 x 88	6	4 x 1,000	11.30	0.082	20

Codes **300800** and **300400** have graduation rings. Code **300800** (mod. 3) is graduated at 1, 2.5 and 4 ml; code **300400** (mod. 6) is graduated at 1, 2.5 and 5 ml.

Dimensions (±0,09)

code	internal diameter mm	external diameter mm	total length mm	maximum volume ml
300500	10	11.5	54.4	3.5
300300	9.1	10.8	69.4	4.0
300800	10.3	11.8	74.5	5.5
300800.1	10.2	11.8	74.5	5.5
300800.2	10	11.8	74.5	5.3
300400	10.4	12	87.6	5.9

Suitable for centrifugation up to 7,500 xg.
A complete range of test tube caps is detailed on page 125 of this catalogue.
All tubes are suitable for laboratory use.

Round bottom polystyrene tubes

CE (IVD)

Manufactured from high technology, new generation moulds to ensure the reproducibility of each tube. Tubes are made in one piece to ensure uniformity and dimensional accuracy from tube to tube.

mod.	code	dimensions mm	volume ml	case quantity	case weight	case volume	cases per pallet
1	**300700**	13 x 75	5	4 x 1,000	12.50	0.082	20
2	**301700**	13 x 100	7	6 x 500	11.60	0.082	20
3	**300900**	16 x 95	10	5 x 500	12.00	0.096	16
4	**300705**	16 x 100	10	5 x 500	14.80	0.110	16
5	**300100**	16 x 150	17	1,000	9,84	0.093	20

Code **300900** (mod. 3) has graduation rings at 2.5, 5 and 10 ml.

Dimensions (±0,09)

code	internal diameter mm	external diameter mm	total length mm	maximum volume ml
300700	10.9	12.9	74.7	6.7
301700	11.0	12.9	99.6	8.3
300900	13.8	15.8	94.6	12.2
300705	13.8	16.0	99.8	13.2
300100	14.6	16.3	151.0	21.1

Suitable for centrifugation up to 7,500 xg. (excepting code **300100**, which does not withstand centrifugation).
A complete range of test tube caps is detailed on page 125 of this catalogue.
All tubes are suitable for laboratory use.

Ultra clear polypropylene tubes

CE (IVD)

Manufactured from high technology, new generation moulds to ensure the reproducibility of each tube.
Tubes are made in one piece to ensure uniformity and dimensional accuracy from tube to tube.
Autoclavable up to **121 ºC**.

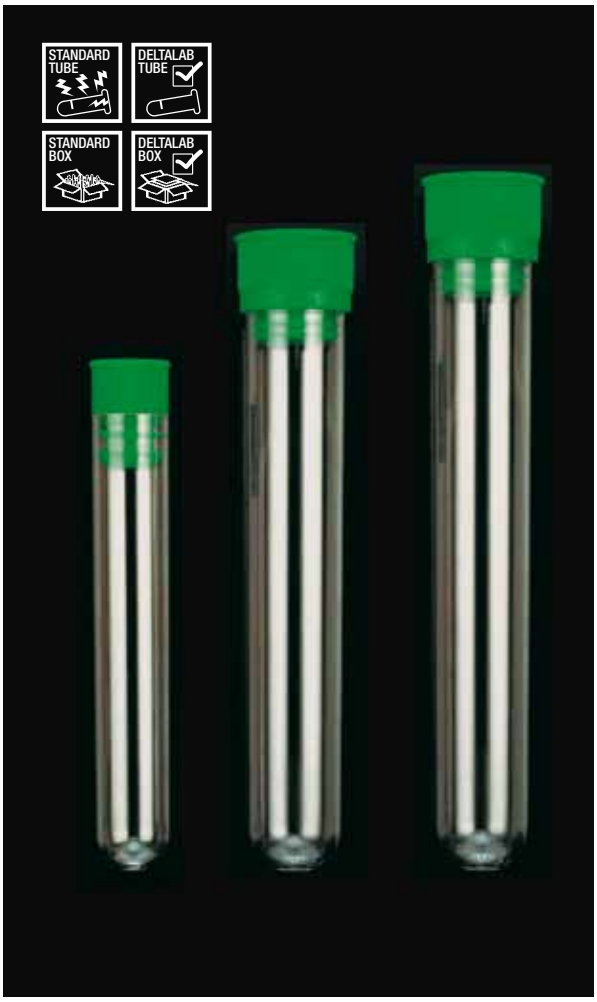
mod.	code	dimensions mm	volume ml	case quantity	case weight	case volume	cases per pallet
1	**400500**	11 x 55	3	2 x 2,000	6.50	0.046	32
2	**400800**	12 x 75	5	4 x 1,000	8.00	0.075	20
3	**400800.1**	12 x 75	5	4 x 1,000	8.00	0.075	20
4	**400700**	13 x 75	5	4 x 1,000	9.70	0.082	20
5	**400400**	12 x 88	6	4 x 1,000	9.60	0.082	20
6	**401700**	13 x 100	7	6 x 500	9.40	0.082	20
7	**400900**	16 x 95	10	5 x 500	10.10	0.096	16
8	**400705**	16 x 100	10	5 x 500	12.20	0.096	16
9	**401100**	15 x 50	5	5 x 1,000	10.40	0.082	20

Certain codes have graduation rings: **400800** (mod. 2): graduated at 1, 2.5 and 4.0 ml; code **400400** (mod. 5): graduated at 1, 2.5 and 5.0 ml; **400900** (mod. 7): graduated at 2.5, 5 and 10 ml; **401100** (mod. 9): graduated at 2.5 and 5 ml.

Dimensions (±0,09)

code	internal diameter mm	external diameter mm	total length mm	maximum volume ml
400500	9.9	11.4	53.9	3.4
400800	10.3	11.7	73.9	5.3
400800.1	10.2	11.7	73.9	5.3
400700	10.9	12.7	73.7	6.4
400400	10.3	11.9	86.9	5.8
401700	11.0	12.7	98.4	8.1
400900	13.7	15.5	93.7	11.9
400705	13.7	15.8	98.6	12.7
401100	13.7	15.5	48.9	6.5

Suitable for centrifugation up to 15,000 xg.
A complete range of test tube caps is detailed on page 125 of this catalogue.
All tubes are suitable for laboratory use.



Polystyrene tubes capped

CE (IVD)

Suitable for centrifugation up to 7,500 xg.

code	dimensions tube mm	height tube + cap mm	volume ml	case quantity	case weight	case volume	cases pallet
300702	13 x 75	83.4	5	2 x 1.000	7.5	0.046	32
300903	16 x 95	105.2	10	2 x 500	7.0	0.110	40
300907	16 x 100	109.6	11	4 x 500	15.0	0.110	16

Components:

code	tube		cap
300702	**300700**	**+**	**307107**
300903	**310900**	**+**	**318107**
300907	**300705**	**+**	**308107**

See Chapter 5.
Sampling and Transport.

Polystyrene tubes, capped and labelled

CE (IVD)

Suitable for centrifugation up to 3,000 xg.
Dimensions of the label: 35 x 25 mm.

code	dimensions tube mm	height tube + cap mm	volume ml	case quantity	case weight	case volume	cases pallet
300804	12 x 75	82.9	5	2 x 1,000	7.3	0.046	40
300704	13 x 75	83.4	5	2 x 1,000	7.5	0.046	40
300904	16 x 95	105.0	10	2 x 500	7.1	0.046	48
300908	16 x 100	110.4	11	4 x 500	14.0	0.096	16

Components:

code	tube		cap
300804	**300800**	**+**	**305807**
300704	**300700**	**+**	**307107**
300904	**300900**	**+**	**308107**
300908	**300705**	**+**	**308107**

Conical tubes

CE (IVD)

Manufactured in polypropylene (PP) and polystyrene (PS).

mod.		code	dimensions mm	material	volume ml	case quantity	case weight	case volume	cases per pallet
1	–	**301200**	16 x 102	PS	12	5 x 500	12.9	0.096	16
2	121°C	**401200**	16 x 102	PP	12	5 x 500	10.6	0.096	16
3	–	**301213**	17 x 105	PS	12	1,500	8.80	0.088	20
4	–	**301212**	17 x 105	PS	12	1,500	8.80	0.088	20
5	–	**301201**	16 x 100	PS	12	5 x 500	12.5	0.096	16
6	121°C	**401201**	16 x 100	PP	12	5 x 500	10.2	0.096	16
7	–	**301202**	16 x 102	PS	12	5 x 500	12.9	0.096	16
8	121°C	**401204**	16 x 100	PP	12	5 x 500	10.2	0.096	16

Codes **301200** (mod. 1), **401200** (mod. 2) and **401204** (mod. 8) have internal graduations.
Codes **301213** (mod. 3) and **301212** (mod. 4) are flared at their top for easy pouring and have a special sedimentation base.
Codes **301200** (mod. 1), **401200** (mod. 2) and **301202** (mod. 7) have an external rim.

Dimensions (±0,09)

code	internal diameter mm	external diameter mm	total length mm	maximum volume ml
• **301200**	14.5	19.1/16.4	100.8	12.9
• **401200**	14.4	18.8/16.2	99.8	12.5
• **301213**	15.4/19.2	17.1/19.2	105.1	16.5
• **301212**	15.4/19.2	17.1/22.0	105.0	16.4
301201	14.5	16.4	99.5	12.9
401201	14.4	16.2	98.4	12.5
• **301202**	14.5	19.1/16.4	100.8	12.9
401204	14.4	16.2	98.4	12.5

• External diameter of the rim.

All models are suitable for centrifugation.
PS tubes: **7,500 xg**; PP tubes: **15,000 xg**.
Except code **301212** and **301213** to **3,000 xg**.

Polyethylene caps

mod.	code	to fit tubes	bag quantity	bag weight	bag volume	yellow	natural	malve	blue	green	red	black
						(to add at the end of the code)						
1	**3053**	**300500, 400500, 300800.2**	2 x 2,000	1.90	0.008		02	08		07	06	
2	**3003**	**300300**	5 x 1,000	3.40	0.016		02					
3	**3058**	**300800, 400800, 300800.1, 300400, 400400, 400800.1**	2,000	1.90	0.008		02	08	05	07	06	09
4	**3071**	**300700, 301700, 400700, 401700, 300701,** serial **300700.6**	2,000	1.90	0.007	01	02	08	05	07	06	09
5	**3072**	**300705, 300900, 400705, 400900, 401100, 300707**	2,500	3.20	0.016		02		05	07	06	
6	**3050**	**300705, 300900, 400705, 400900, 401100, 300907, 300904, 300908**	2,500	4.10	0.020		02	08		07		
7	**3081**	**300705, 300900, 400705, 400900, 401100, 300707, 300907, 300904, 300908**	2,500	5.00	0.030		02			07	06	
8	**3070**	**300100**	1,000	1.20	0.010						06	
9	**3055**	**301201, 401201, 301200, 401200, 301202, 401204**	2,500	4.00	0.020		02			07		
10	**3082**	**301201, 401201, 401204**	2,500	5.10	0.028		02		05			
11	**3066**	**301213, 301212**	1,500	1.15	0.008	01						

Ask for other colours.

Re-caps

Ideal for re-capping blood collection tubes «vacuum type».
Suitable for other glass and plastic tubes.
Manufactured in flexible polyethylene.
Easy to cap and remove.

code	description	case quantity	case weight	case volume
308502	Ø 12-13 mm natural colour	6 x 1,000	1.70	0.025
308506	Ø 12-13 mm red colour	6 x 1,000	2.18	0.025
308602	Ø 15,2-16 mm natural colour	6 x 1,000	3.31	0.025
308606	Ø 15,2-16 mm red colour	6 x 1,000	3.31	0.025

Other colours available on request, minimum order quantity is 6,000 units.

Please find racks for these tubes
on Chapter 9. **Sample Storage**

General features of our caps:

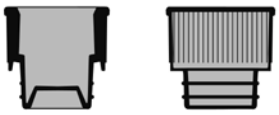
3053 Internal diameter: 10.00 mm
External diameter: 11.85 mm
Total Length: 11.30 mm

Includes a small internal chamber. Light-weighted.
Ergonomical. Ribbed for a better handling while using gloves.
Cap includes two internal ribs to clamp firmly on the tube. Leakproof.

3003 Internal diameter: 9.25 mm
External diameter: 11.35 mm
Total length: 16.60 mm

Flat base. No chamber. Ribbed.
Cap includes three internal ribs to clamp firmly on the tube. Leakproof.

3058 Internal diameter: 10.60 mm
External diameter: 15.00 mm
Total length: 15.30 mm



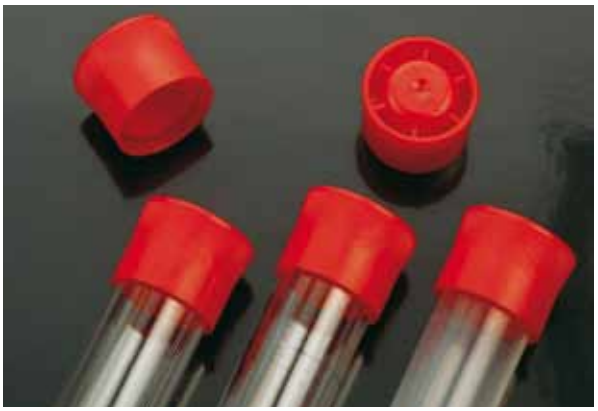
Includes a small internal cavity designed to prevent possible drop spillage. Ergonomical.
Ribbed for a better handling while using gloves. Leakproof. Cap includes two ribs to clamp firmly on the tube. Top of the cap raised for easy-on, easy-off use and to avoid cap deformation from repeated removal.

Those three flange plug caps present significant advantages over other flange caps existing on the market, which are:

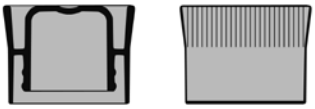
- a larger size, providing a larger surface for finger rest;
- flanges have a larger size than on other caps. More space between each flange increase the cap sealing qualities;
- a small internal cavity designed to prevent possible drop spillage;
- a raised top for easy-on, easy-off use and to avoid cap deformation from repeated removal;
- a ribbed surface;

Note on flange cap dimensions: using flange caps implies reducing tube capacity. If as much tube volume as possible is required, we recommend the use of those caps including a chamber, such as codes **3082**, **3050** and **3081**. To avoid possible liquid spillage on the benchtop, leave caps stand with flanges up.

code	internal Ø mm	external Ø mm	total length mm
3072	15.40	17.00	21.60
3055	14.50	17.05	21.77
3071	11.25	13.30	17.40

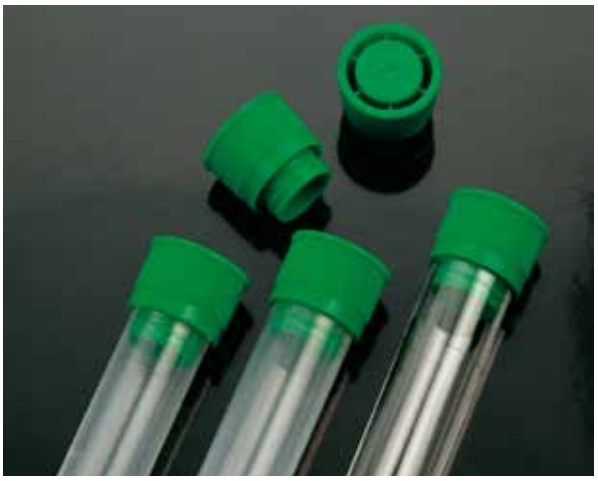


3050 Internal diameter: 13.95 mm
External diameter: 19.30 mm
Total length: 13.15 mm

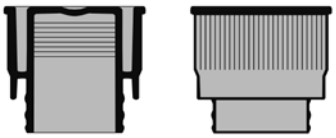


Includes an internal chamber for more liquid filling, thus compensating for the loss of space inside the tube caused by the insertion of a cap. Leakproof closing. Ergonomical. Ribbed surface. Cap shape is slightly conical for a better handling.
Also features an external flap so as to:

- avoid contact between liquid and fingers when opening the tube,
- prevent dripping when cap is left on the benchtop,
- provide easy single-handed opening,
- offer a cap specially designed to fit our range of blood collection tubes, diameter 15 mm.

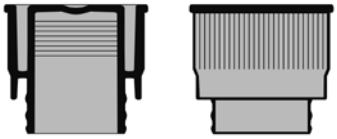


3081 Internal diameter: 13.80 mm
External diameter: 19.88 mm
Total length: 19 mm



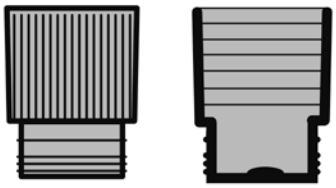
One of the caps offering the largest chamber on the market, thus compensating for the loss of space inside the tube caused by the insertion of a cap. Leakproof closing.
This cap allows an almost complete filling of the tube and eliminates the need for a fill-in line.
Ribbed for a better handling while using gloves.
The inner part of the cap, long-sized, consists of three rings to ensure a tight, safe leakproof closing. Top of the cap raised for easy-on, easy-off use and to avoid cap deformation from repeated removal. Ideal for use with urine.
To avoid possible liquid spillage on the benchtop, leave caps stand with flanges up.

3082 Internal diameter: 14.55 mm
External diameter: 20.45 mm
Total length: 18.50 mm



It has the same characteristics than the previous cap.

3070 Internal diameter: 14.80 mm
External diameter: 19.20 mm
Total length: 25.35 mm



Ribbed for a better handling while using gloves.
No chamber. Leakproof. Includes four internal rims to clamp firmly on tube. Reversible cap: use it as a watertight seal, or invert it for use in its “re-cap” position, as a simple closure, when no leakproof seal is required.

3066 External diameter: 23.30 mm
Total length: 5.90 mm

Light-weighed. Includes a lifting tab for easy opening.

Sterile culture tubes in polystyrene

Tubes supplied with either a two position ribbed polyethylene cap, which can be left loose for aerobic work or sealed for anaerobic cultures.
They are biologically inert, exempt from mold release agents, and withstand up to **1,400 xg** and **70 ºC**.
Packaged in self-standing resealable zip-lock bags of 125 units.

code	dimensions mm	case quantity	case weight	case volume
300807	12 x 75	8 x 125	4.24	0.033
300808	17 x 100	8 x 125	7.14	0.060

Loose position for aerobic work

PosSealed position for anaerobic cultures

EUROTUBO® 12 ml screw cap tubes, round bottom

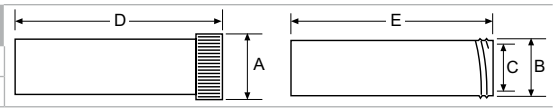
CE (IVD)

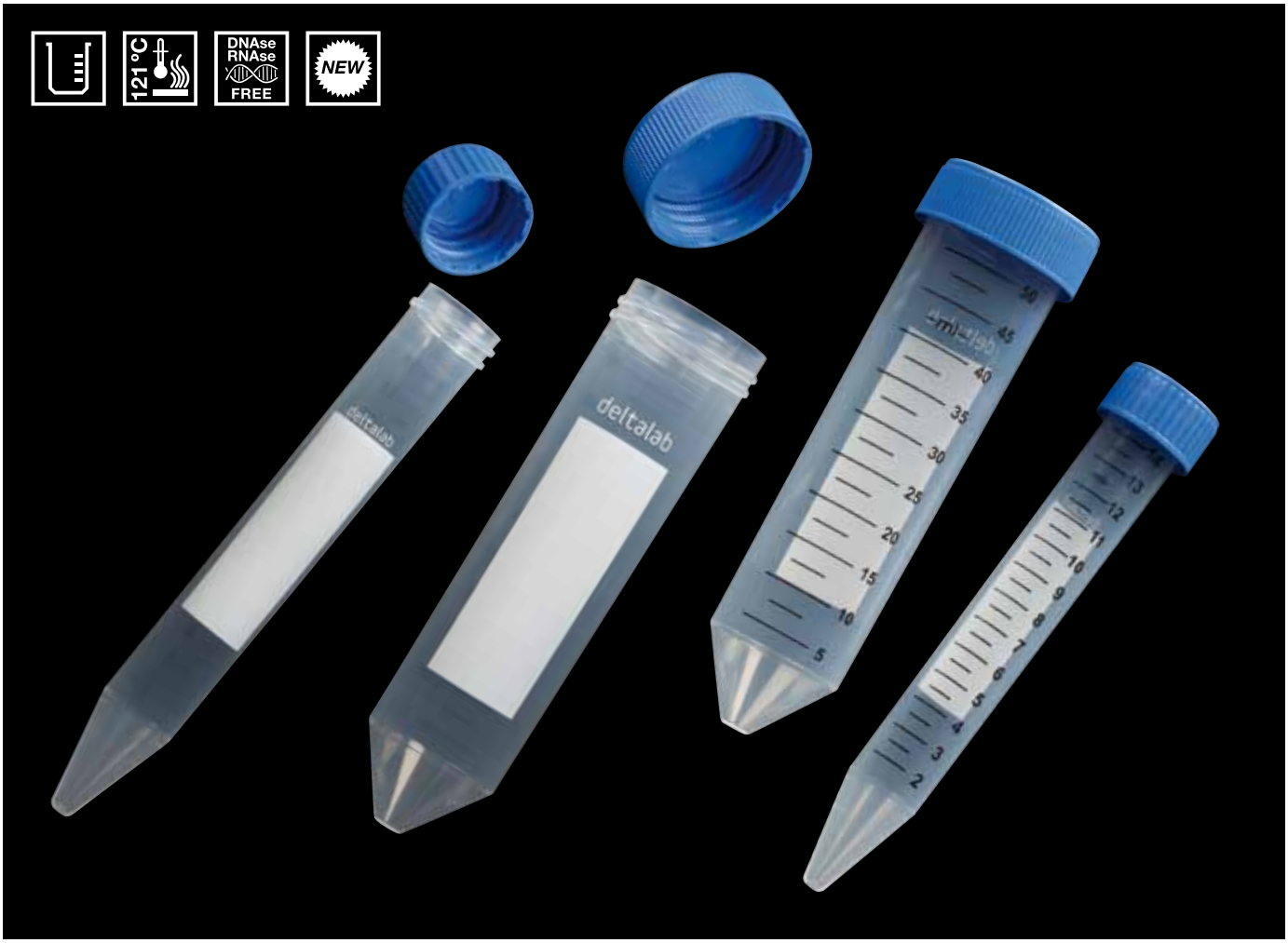
Made of **autoclavable** (**121 ºC**) transparent polypropylene or polystyrene. Green cap made of high density polyethylene. Dimensions: 15 x 102 mm. The external skirt allows the tubes to remain **free-standing.** Supplied screwed. Recommended volume: 12 ml. The sterile model (ethylene oxide) is supplied individually in flow-pack bag, with indication of batch, expiration date, etc.
According to the guidelines for sterile products. Resistance to centrifugation: **PS: 7,500 xg. PP: 15,000 xg.**
Attention: For autoclaving, the cap should be loose on the thread and not tightly fitted.

mod.	code	description	sterile	maximum volume ml	volume recom. ml	case quantity	case weight	case volume	cases pallet
1	**301403**	polystyrene	no	14.4	12	6 x 250	12.66	0.082	20
2	**301402**	polystyrene individually wrapped	**STERILE EO**	14.4	12	6 x 250	13.00	0.096	16
3	**401402**	polypropylene individually wrapped	**STERILE EO**	14.2	12	6 x 250	11.80	0.096	16
4	**401403**	high transparency polypropylene	no	14.2	12	6 x 250	11.00	0.082	20

Dimensions (±0,09):

code	external cap Ø mm A	external tube Ø mm B	internal tube Ø mm C	length with cap mm D	length without cap mm E
301402, 301403	20.9	16.3	14.4	103.9	102.5
401402, 401403	20.9	16.2	14.3	102.9	101.5





15 ml and 50 ml centrifugal tubes

CE (IVD)

Made of polypropylene, suitable for both clinical and research applications.
DNAsa, RNAsa and pyrogen free. They are also free from natural rubber and heavy metals.
High transparency of the material for a clear visualization during experiments specially for molecular biology and animal tissue culture.
Tube and cap designed with the system of flat threads for a complete leakproof.
Highly smooth hydrophobic surface for minimum disturbance during centrifugation.
Silk-screen blue graduation in the tube and large white frosted portion for easy writing.
Autoclavable at 121 ºC.
Centrifugation resistance: **14.000 xg**.
Available models: 15 ml non-skirted and 50 ml skirted and non-skirted.

code	description	presentation	sterile	case weight	case volume	cases per pallet
15 ml tubes						
429940	non-skirted tube	500 tubes in bulk	NO	500	4.5	0.0264
429945	non-skirted tube	20 bag to 25 tubes.	NO	500	4.6	0.0264
429942	non-skirted tube	20 bag to 25 tubes.	**STERILE R**	500	4.6	0.0264
50 ml tubes						
429930	non-skirted tube	20 bag to 25 tubes.	NO	500	8	0.0663
429931	non-skirted tube	20 bag to 25 tubes.	**STERILE R**	500	8	0.0663
429950	skirted tube	20 bag to 25 tubes.	NO	500	9	0.0663
429951	skirted tube	20 bag to 25 tubes.	**STERILE R**	500	9	0.0663

5 and 10 ml freestanding, conical bottom tubes

Freestanding tubes with screw caps. Conceived for sampling, transport and midterm storage. Feature molded graduations at 1 ml increments and a large surface for labeling and identification. Round bottom tubes made of **autoclavable** polypropylene, leakproof caps made of polyethylene.
Withstand temperatures between **121 ºC and –80 ºC** (–40 ºC as the lowest working temperature).
Certified to the **IATA 95kPA** standard for safe shipping of samples.

code	description	case quantity	case weight	case volume
439905	5 ml PP thread tube	2 x 500	5.45	0.032
439910	10 ml PP thread tube	2 x 500	6.35	0.055

Dimensions (±0,5):

code	external cap Ø mm	internal tube Ø mm	length with cap mm	length without cap mm
439905	15.8	14.17	60.20	58.62
439910	15.8	14.17	94.74	92.96

15 ml and 50 ml conical high resistance tubes. Sterile

CE (IVD)

Tubes made of transparent, copolymer polypropylene.
Green caps made of polyethylene with an internal liner which ensures leakproofness.
Tubes feature a solvent resistant white panel and black graduations for use both for clear or dark samples.
DNAse, RNAse, endotoxins and metal free.
They are sterile by radiation and withstand temperatures down to **–90 ºC** (15 ml) and **–80 ºC** (50 ml)..
Resistance to centrifugation: **17,000 xg** (15 ml) and **20.000 xg** (50 ml).
Autoclavable tube (the liner of the cap is not autoclavable)
Supplied in bags of 50 units.
Bags are printed with instructions for use and feature a double closure: a first tamper evident seal that helps guaranteeing sterility, and a secondary zip-lock, resealable closure.

	code	presentation	capacity ml	dimensions mm	case quantity	case weight	case volume
1	**409920**	bag 50 units	15	17 x 118	10 x 50	4.12	0.035
2	**409922**	bag 50 units	50	29.6 x 114.6	10 x 50	8.16	0.076

EUROTUBO® 15 ml and 50 ml conical tubes

CE (IVD)

Tubes made of transparent polypropylene, conical bottom. Suitable for centrifugation tests in immunology laboratories, microbiology, etc.
With continuous thread and molded external graduation each 0.5 ml in 15 ml tubes, and each 5 ml in 50 ml tubes.
Blue polyethylene cap with internal elastic obturation to assure an hermetical closure.
Resistance to centrifugation:
15 ml tubes, non sterile models until **7.000 xg**, sterile models **5.000 xg.**
50 ml tubes, non sterile models until **12.000 xg**, sterile models **7.000 xg**.
Sterile models are not suitable for autoclaving.
Non sterile models are **autoclavable at 121 °C,** with the cap positioned on the thread but uncapped.
50 ml tubes have skirted and non skirted models.

code	description	sterile	external cap Ø mm	internal tube Ø mm	external tube Ø mm	length with cap mm	case quantity	case weight	case volume	cases per pallet
15 ml conical tubes										
429910	non sterile	no	20.9	14.35	17	120	500	3.8	0.029	54
429920	100 units in bag	**STERILE R**	20.9	14.35	17	120	5 x 100	3.9	0.029	54
429946	individualy bagged	**STERILE R**	20.9	14.35	17	120	500	3.9	0.038	40
50 ml conical tubes										
429900	non skirted	no	34.4	27.2	29.5	117.5	500	7.9	0.075	20
429900SP	non skirted, unscrewed cap	no	34.4	27.2	29.5	117.5	500	7.9	0.082	20
429901	skirted	no	34.4	27.2	29.5	117.5	500	8.5	0.082	20
429926	non skirted, individually wrapped	**STERILE R**	34.4	27.2	29.5	117.5	500	8.2	0.082	20
NEW **429926.25**	non skirted, bag 25 units	**STERILE R**	34.4	27.2	29.5	117.5	20x25	8.2	0.082	20
429926.10	non skirted, bag 100 units	**STERILE R**	34.4	27.2	29.5	117.5	5x100	7.9	0.082	20
429927	skirted, individually wrapped	**STERILE R**	34.4	27.2	29.5	117.5	500	8.8	0.082	20
NEW **429927.25**	skirted, bag 25 units	**STERILE R**	34.4	27.2	29.5	117.5	20x25	8.8	0.082	20
429927.10	skirted, bag 100 units	**STERILE R**	34.4	27.2	29.5	117.5	5x100	8.5	0.082	20

GLASS TUBE RANGE

The high quality of our range of disposable glass culture tubes and screw threaded tubes is reflected in the uniformity of their wallthickness, shape of their bottoms, close tolerances, well formed bottoms and well moulded screw-neck.
All of our tubes are fully annealed at temperatures above **500 ºC** to eliminate contamination, reduce breakage and increase strength.
The majority of our tubes are packaged in plain outer cases.
Each tube is polished individually.

Culture tubes:
They are available in either borosilicate or soda lime glass. Both glasses differ primarily in their chemical composition and their chemical resistance.

Borosilicate glass is a type of glass with a higher resistance to thermal shock. For this reason borosilicate glass is more suitable when tubes are intended to be heated or cooled rapidly.

Soda lime glass is a more economical alternative and suits for most culture medium,bacteriological and laboratory applications where the tube will not be subjected to extreme temperature changes.

Screw-neck tubes are ideal for tissue culture and general bacteriological work. Tubes are supplied with standard GPI finishes.

The screw – neck vials are made of borosilicate glass and are basically used for diagnosis, pharmaceutics, chemicals, laboratory analysis, storage of liquids and powders. The caps presented are manufactured in autoclavable polypropylene with internal silicone joint.

Different packagings are available, depending on the model of tube:

Boxes: sturdy cardboard boxes. Each box contains small shrink-wrapped cases. Tubes are presented horizontally.

Trays: sturdy shrink-wrapped cardboard trays. Tubes are presented vertically.

Culture tube cap

Made of polypropylene, **autoclavable** up to **121 ºC**.
Suitable with codes **916100, 816100, 916150, 816150** and **816160**.
Vented caps (with inner flats).
Recommended for glass tubes.

code	recommended for tubes Ø mm	colour	case quantity	case weight	case volume
617402	16	natural	4 x 1,000	5.3	0.08

Round bottom glass tubes

Made of **borosilicate** or **soda** glass.
The high quality of those tubes is reflected in the uniformity of their wall thickness and of their diameter and height dimensions.
Supplied in small quantities per case for a more convenient use in laboratory.

code boro	code soda	total capacity ml	Ø int. mm tube	Ø ext. mm tube	height mm	thickness mm	case quantity	case weight	case volume
Supplied in boxes (1)									
901075	**801075**	4	8.20	9.75	75	0.60	4 x 250	3.60	0.010
901275	**801275**	6	10.20	11.60	75	0.60	4 x 250	4.50	0.014
913100	**813100**	10	11.10	12.70	100	0.60	4 x 250	5.90	0.022
916100	**816100**	15	13.95	15.75	100	0.60	4 x 250	9.10	0.034
916150	**816150**	22	13.55	16.00	150	0.70	4 x 250	13.60	0.049
	816160	27	14.40	16.00	160	0.55	500	5.50	0.018
918150	**818150**	28	15.00	18.00	150	0.85	2 x 250	7.30	0.030
	820150	34	17.20	20.00	150	0.85	100	1.92	0.006
	820200	47	17.15	19.25	200	0.85	250	6.30	0.020
Supplied in trays (2)									
	801175T	6	10.10	11.60	75	0.50	500	1.89	0.005

Screw threaded glass tubes

Made of **borosilicate** or **soda glass.** The high quality of those screw threaded tubes is reflected in the uniformity of their wall thickness and of their diameter and height dimensions.
Supplied in small quantities per case for a more convenient use in laboratory.
Tubes are supplied without caps. To order caps see below.
Polypropylene caps are designed for the round bottom tubes.
Aluminium caps are designed for flat bottom tubes.

code	total capacity ml	screw	Ø int. mm tube	Ø ext. mm tube	height mm	thickness mm	case quantity	case weight	case volume	suitable cap
Round bottom **borosilicate** tubes, supplied in boxes.										
713100	5	13 - 415	10.65	12.75	100	1.00	4 x 250	9.56	0.025	**617100**
716100	11	15 - 415	14.00	16.00	100	1.05	4 x 250	13.60	0.045	**617200**
716125	14	15 - 415	14.00	16.00	125	1.05	4 x 250	14.64	0.045	**617200**
716150	18	15 - 415	14.00	16.00	150	1.05	4 x 250	17.42	0.047	**617200**
720150	34	18 - 415	17.70	20.00	150	1.15	4 x 125	11.80	0.036	**617300**
Flat bottom **soda** glass tubes supplied in trays.										
617145	24	15 - 415	14.20	17.75	144.5	1.05	252	5.54	0.010	**617000**

Screw caps for the above tubes

For round bottom borosilicate glass tubes, choose **polypropylene caps (black colour).**
For flat bottom soda glass tubes, choose **aluminium** caps, with an internal liner made of caoutchouc.
Pharmaceutical quality.
Both models of caps are fully **autoclavable**.

code	suitable tube	type of cap	bag quantity	bag weight	bag volume
617000	**617145**	aluminium	500	0.4	0.005
617100	**713100**	polypropylene	1,000	0.9	0.001
617200	**716100 / 716125 / 716150**	polypropylene	1,000	1.2	0.002
617300	**720150**	polypropylene	500	1.1	0.003

Flat bottom screw threaded vials

Made of ultra clear borosilicate glass. Fully **autoclavable**.
Supplied in trays individually shrink-wrapped. Thickness: 1 mm. Caps are supplied separately. To order caps see below.

mod.	code	dimensions mm	volume ml	screw	tray quantity	tray weight	tray volume	suitable cap
1	**900204**	15 x 45	4	13-425	100	0.4	0.001	**917000**
2	**900205**	18 x 50	5	15-425	250	1.1	0.003	**918000**
3	**900211**	22 x 48	10	18-400	100	0.9	0.001	**922000**
4	**900212**	19 x 65	12	18-400	100	1.1	0.002	**922000**
5	**900220**	28 x 65	20	22-400	2 x 150	5.4	0.010	**928000**
6	**900225**	28 x 70	24	22-400	100	1.9	0.005	**928000**

Caps for the above vials

Made of **autoclavable** polypropylene. Black caps feature an internal silicone joint.

letter	code	screw	bag quantity	bag weight	bag volume
A	**917000**	13-425	100	0.10	0.001
B	**918000**	15-425	250	0.18	0.001
C	**922000**	18-400	250	0.22	0.001
D	**928000**	22-400	300	0.28	0.001

Racks for containers up to 23 mm Ø

Made of stainless steel. 25 mm square holes.
Features a strong woven mesh base.

code	large x width x height mm	tubes capacity	quantity	weight	volume
D-200	265 x 265 x 85	100 (10 x 10)	1	0.425	0.0059
D-230	219 x 166 x 85	48 (8 x 6)	1	0.238	0.0030
D-240	165 x 110 x 85	24 (6 x 4)	1	0.145	0.0015
D-250	111 x 84 x 85	12 (4 x 3)	1	0.095	0.0008

See other racks for tubes in Chapter 9. **Sample Storage**

0.4 ml microtubes, Beckman® type

Manufactured in polyethylene.
Dimensions: 5.50 x 47.50 mm (Ø x h), capped.
Withstand centrifugation up to **11.000 xg** and can be used at temperatures from **–10 ºC** to **130 ºC**.

code	description	case quantity	case weight	case volume
900007	**Beckman®** type microtube 0.4 ml	18 x 1,000	11.32	0.070

See our wide range of racks for microtubes in Chapter 9. **Sample Storage**

0.5 ml microtubes, Vitatron® type

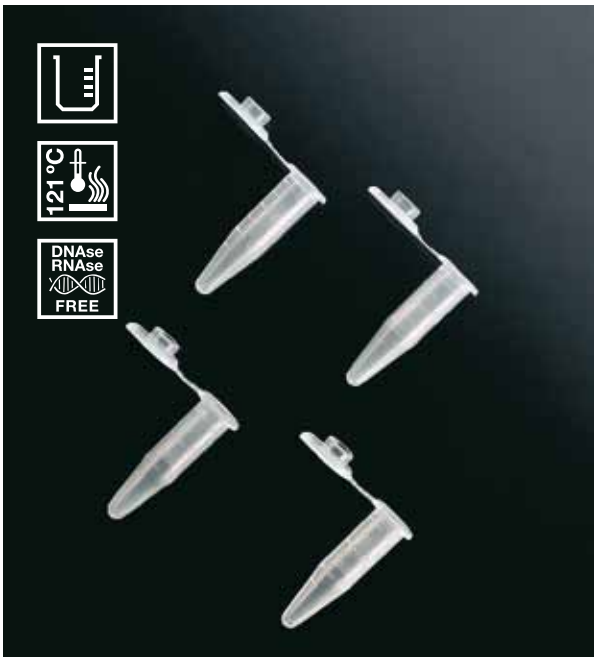
Manufactured in polypropylene.
Autoclavable. Graduated.
Easy handling caps: they can be opened and closed with one hand.
Will withstand centrifugation up to: **14,000 xg**.
Dimensions: 7.87 x 31.8 mm (diameter x height) capped.

code	description	case quantity	case weight	case volume
900118	**Vitatron®** type microtube 0.5 ml	12 x 1,000	7.0	0.052

0.5 ml microtubes, Vitatron® type

Made of **autoclavable** polypropylene. Ideal for little sample volumes, microtechniques, microsedimentation, etc.
Suitable for transport, storage and freezing of biological samples.
Watertight closing system.
Easy handling caps: they can be opened and closed with one hand.
Easily pierceable.
Will withstand centrifugation up to **11,000 xg**.
The rim in the inner part of the cap assures an optimum watertightness.
Resist temperatures from **–10 ºC** to **130 ºC**.
Dimensions: 7,50 x 31,25 mm (Ø x h) capped.

code	description	case quantity	case weight	case volume
900117	**Vitatron®** type microtube 0.5 ml	14 x 1,000	7.30	0.069



0.5 ml microtubes

Made of ultra clear polypropylene. **Autoclavable**.
Tubes have a frosted writing surface on side and on closure for better sample identification.
Caps are easy to handle and can be opened and closed with one hand. Lids are easily pierceable. Tubes have moulded-in graduations in 100 ul increments from 0.1 to 0.6 ml. Withstand centrifugation up to **17,000 xg**.
Dimensions: 30 x 8 mm. Can be used from **–80 °C** to **121 °C**.
RNAse, DNAse and PCR inhibitors free.
Model **4092.1NS,** with a low adhesion surface, is specially designed for research procedures such as protein work and nucleic acid amplifications.
Made from special resins to minimise liquid retention and ensure optimum sample yield, thus eliminating the use of lubricants that may be harmful to samples.
The proprietary formulation is completely **non-reactive.**

code	description	case quantity	case weight	case volume
4092.1N	natural graduated	10 x 1.000	7.28	0.053
4092.1NS	low adherence natural graduated	10 x 500	3.42	0.028

Standard 1.5 ml microtubes

Made of ultra clear polypropylene. **Autoclavable**.
Attached flat caps.
Tubes can be easily opened and closed with one hand. Ideal for the storage and freezing of any kind of biological material (cells, sperm, bacteria, etc.).
Can be used at temperatures down to **–100 °C**.
Withstand centrifugation up to **11,000 xg.**

code	dimensions Ø x h mm	colour	case quantity	case weight	case volume
200400	10.86 x 39.06	natural	5 x 1,000	5.40	0.051
200401	10.86 x 39.06	yellow	5 x 1,000	5.40	0.051
200405	10.86 x 39.06	blue	5 x 1,000	5.40	0.051
200407	10.86 x 39.06	green	5 x 1,000	5.40	0.051
200410	10.86 x 39.06	pink	5 x 1,000	5.40	0.051

1.5 ml microtubes

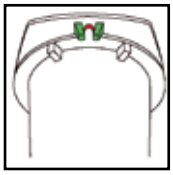
Manufactured in polypropylene. **Autoclavable**.
Easy opening and closing.
Graduated tube.
It features a frosted area for writing. Flat cap.
Will withstand centrifugation up to: **12,500 xg.**

code	dimensions Ø x h mm	case quantity	case weight	case volume
200400P	10.2 x 39.9	12 x 500	7.42	0.056

1.5 ml safety lock microtubes

Made of ultra clear polypropylene.
Feature a special “snap-seal” secure lock.
A special locking clasp with a distinctive audible snapseal design ensures tubes will not open during centrifugation. Tubes have a frosted writing surface on side and on attached closure for better sample identification.
Caps are easy to handle and can be opened and closed with one hand. Lids are easily pierceable.
Tubes have moulded-in graduations in 0.5 ml increments.
Autoclavable.
Can be used from **–90 °C** to **121 °C.**
Withstand centrifugation up to **17,000 xg.**

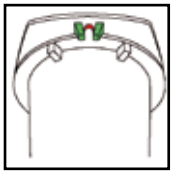
code	dimensions Ø x h mm	case quantity	case weight	case volume
4092.5N	11 x 39	10 x 500	5.76	0.055



1.5 microtubes with secure lock pick-up tab

Same characteristics as code **4092.5N** but these microtubes include a pick-up tab for easier handling without actually touching the tube.
Pierceable cap.
Withstand centrifugation up to **17,000 xg.**
Autoclavable.
Withstand temperatures from **–175 °C** to **121 °C**.

code	colour	case quantity	case weight	case volume
4091.1N	natural	10 x 500	4.94	0.045



1.5 ml graduated microtubes

Made of ultra clear polypropylene.
Autoclavable.
Feature a frosted writing surface on side and on closure for better sample identification. Caps are easy to handle and can be opened and closed with one hand. Lids are easily pierceable.
Can be used from **–80 °C** to **121 °C.**
Dimensions: 39 x 11 mm.
Caps specially designed to reduce popping when centrifugation, freezing, boiling, storing or shipping is required.
- when the objective is to avoid liquid remaining on the wall of the tube, just push the cap slightly and a little centrifugation time is required.
- when centrifugation is required, push the cap firmly to achieve complete closure.

Tubes withstand centrifugation up to **13,000 xg.**

code	colour	case quantity	case weight	case volume
4092.2N	natural	10 x 500	6.82	0.048

Other colours under request.

1.5 ml microtubes. DNASE, RNASE free

Made of ultra clear polypropylene. **Autoclavable**.
Attached flat caps.
Graduated from 100 µl.
Tubes can be easily opened and closed with one hand. Ideal for the storage and freezing of any kind of biological material (cells, sperm, bacteria, etc.).
Can be used at temperatures from **–90 ºC** to **121 ºC**.
Withstand centrifugation up to **20,000 xg.**
DNAse, RNAse, DNA and PCR inhibitors free.
Dimensions (Ø x h): 10.7 x 39.1 mm.

code	description	case quantity	case weight	case volume
4092.3N	natural colour	10 x 500	7.30	0.053
4092.3NS	natural colour, clear siliconised	10 x 250	3.70	0.026

2 ml microtubes with attached caps

Made of ultra clear polypropylene.
Autoclavable.
Certified RNAse and DNAse free.
Feature a frosted writing surface on side and on closure for better sample identification.
Easy handling: tubes can be opened and closed with one hand.
Lids are easily pierceable.
Tubes have moulded-in graduations in 100 µl increments up to 2 ml.
Dimensions: 11 x 40 mm.
Can be used at temperatures from **–90 ºC** up to **121 ºC.**
Withstand centrifugation up to **17,000 xg.**
Model **4092.6NS** has a low adhesion surface for special applications such as protein work.

code	description	case quantity	case weight	case volume
4092.6N	natural colour	10 x 500	7.27	0.053
4092.6NS	natural colour, clear siliconised	10 x 250	4.09	0.036

2 ml graduated microtube

Microtubes made of ultra clear polypropylene. **Autoclavable**.
2 ml graduated tubes with frosted area for writing.
Flat cap that features a secure lock with safety shield.
Easy handling with just one hand.
They can be used at temperatures from **–20 ºC** up to **121 ºC**.
Withstand centrifugation up to **12,000 xg**.

code	dimensions Ø x h mm	case quantity	case weight	case volume
4092.7N	10.3 x 40.5	10 x 500	6.50	0.055

Screw thread microtubes

Made of **autoclavable** polypropylene, they can be used at extreme temperatures from **–190 ° C** to **121 ° C**. Two versions available: in transparent polypropylene, or opaque brown **(UV resistant**, designed to be used with light sensitive samples).
Certified RNAse, DNAse and pyrogen free. Tubes and caps can be centrifuged at **17,000 xg.** Caps are supplied separately, see below. Dimensions: 11 x 44 mm.

mod.	code	volume ml	skirt	case quantity	case weight	case volume
Transparent polypropylene						
1	**409110.1**	0.5	yes	1,000	1.46	0.010
2	**409110.2**	1.5	yes	1,000	1.45	0.010
3	**409110.3**	1.5	no	1,000	1.13	0.010
4	**409110.4**	2.0	yes	1,000	1.34	0.010
Brown polypropylene						
5	**409113.1**	0.5	yes	1,000	1.53	0.010
6	**409113.2**	1.5	yes	1,000	1.34	0.010
7	**409113.3**	1.5	no	1,000	1.34	0.009
8	**409113.4**	2	yes	1,000	1.34	0.009

Caps for screw thread microtubes

Made of polypropylene.
Caps are available either with an attachment loop or without loop.
Both models have a sealing O-ring (red) of silicone to ensure a positive leakproof seal.
For sample identification, colour coding inserts can be placed upon caps (made of polypropylene).
Cap dimensions: 13 x 8 mm.

mod.	code	description	case quantity	case weight	case volume
Transparent polypropylene					
1	**409007.N**	cap with loop	1,000	0.40	0.003
2	**409008.N**	cap without loop	1,000	0.40	0.003
Brown polypropylene					
3	**409007.M**	brown cap with loop	1,000	0.40	0.003
4	**409008.M**	brown cap without loop	1,000	0.40	0.003
Inserts					
5	**409111A**	blue insert	500	0.58	0.003
6	**409111AM**	yellow insert	500	0.58	0.003
7	**409111B**	white insert	500	0.58	0.003
8	**409111R**	red insert	500	0.58	0.003

Screw cap microtubes, with cap. Sterile

Tubes and caps in medical grade, transparent polypropylene.
The cap embodies a non-reactive ethylene-propylene o-ring.
Suitable for **autoclave, liquid nitrogen (gaz) and boiling processes**.
Perfect for long term storage.
Withstand temperatures from **–190 ºC**.
Centrifugation Resistance: **20,000 xg.**
DNAse, RNAse, DNA, and PCR inhibitors free.
Graduated models feature a frosted area for writing.
The non-graduated model incorporates an external grip for an easy handling.
Microtubes are supplied capped, in bags of 50 units.

code	description		graduation	case quantity	case weight	case volume
409115/4	0.5 ml skirted	**STERILE**	✗	50 x 50	5.90	0.030
409115/2	1.5 ml non skirted	**STERILE**	✓	50 x 50	5.90	0.030
409115/6	2 ml skirted	**STERILE**	✓	50 x 50	5.90	0.030
409115/3	2 ml non skirted	**STERILE**	✓	50 x 50	5.90	0.030

Screw thread microtubes

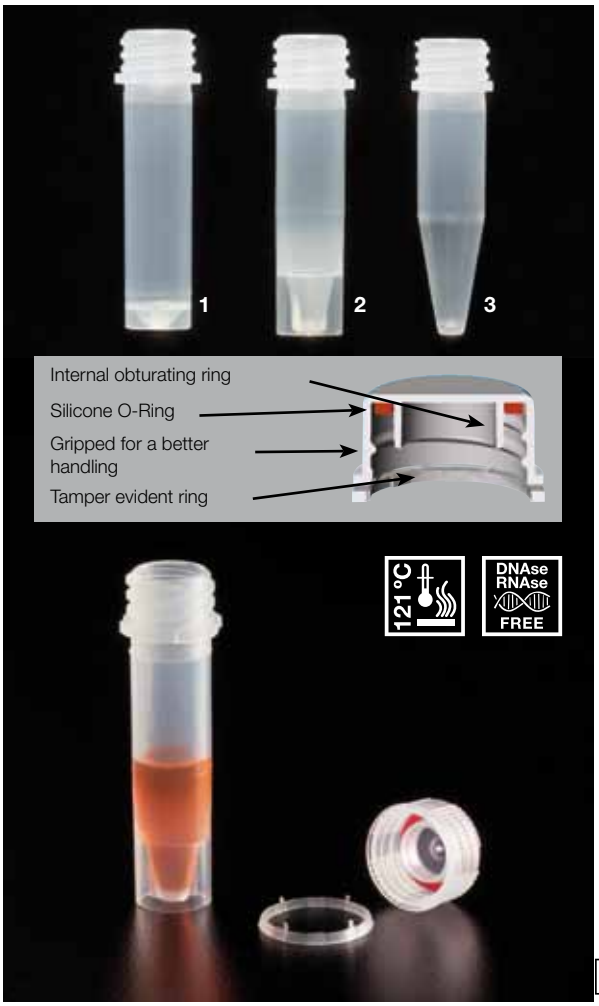
Made of transparent polypropylene.
Suitable for use in liquid nitrogen, **autoclave** and for boiling applications, and can be used at temperatures down to **–190 °C**.
Certified RNAse, DNAse and PCR inhibitors free.
Products ideal for long term sample storage.
Withstand centrifugation at **20,000 xg**. The codes **409111/4**, **409111/5** and **409111/6**, with external moulded slots for better handling with gloves.
Dimensions: 10.3 x 44.5 mm (except code **409111/2**: 10.3 x 43.6 mm).
Caps are supplied separately, see below.

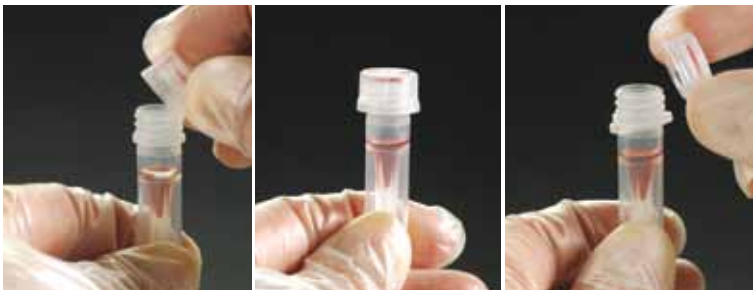
mod.	code	description	graduation	case quantity	case weight	case volume
1	**409111/4**	0.5 ml skirted	✗	500	0.70	0.002
2	**409111/2**	1.5 ml	✓	500	0.60	0.002
3	**409111/5**	1.5 ml skirted	✗	500	0.70	0.002
4	**409111/3**	2.0 ml	✓	500	0.70	0.002
5	**409111/6**	2.0 ml skirted	✗	500	0.70	0.002
6	**409111/7**	2.0 ml skirted	✓	500	0.70	0.002

Caps for screw thread microtubes

Made of medical grade polypropylene.
Feature an internal O-ring to ensure leakproof seal.
Dimensions 13.0 x 6.0 mm.
Certified RNAse, DNAse and PCR inhibitors free.

code	colour	case quantity	case weight	case volume
409112/0	natural	500	0.024	0.0001
409112/1	blue	500	0.024	0.0001
409112/2	green	500	0.024	0.0001
409112/4	red	500	0.024	0.0001
409112/6	yellow	500	0.024	0.0001





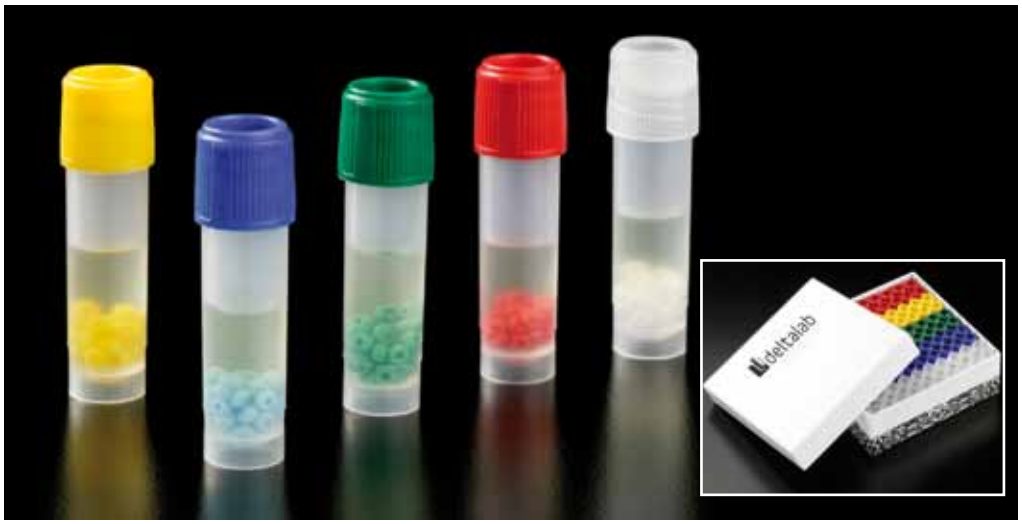
Screw cap until locking ring clicks over serrated tube neck.
Contents are now protected until cap is removed and tamper-evident ring is detached.

Screw thread tamper evident microtubes

Microtubes and caps are made of autoclavable ultra clear polypropylene. Ribbed cap with internal silicone O-ring for a positive **leakproof seal.** Super fast ¼ turn thread design. **Tamper evident** seal which notices if microtube has been opened.
Rnase, Dnase and Pyrogen free.
They can be used at extreme temperatures from **–196 °C** to **121 °C**.
Resistance to centrifugation: **17,000 xg.**
Microtube dimensions: 11 x 44 mm.
Cap dimensions (with tamper-evident ring): 15 x 9 mm.
Used on:

- Test of fertility and DNA testing
- Packaging of diagnostic kits and reagents
- Forensic laboratories

mod.	code	volume ml	case quantity	case weight	case volume
1	**409110.4T**	2	1,000	2.06	0.013
2	**409110.2T**	1.5	1,000	2.06	0.013
3	**409110.5T**	1.5	1,000	0.65	0.013



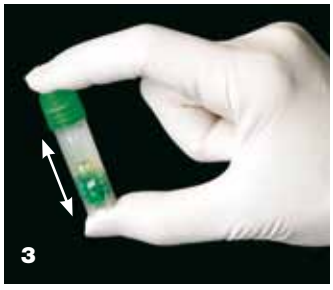
CRYOINSTANT: Porous beads for microbiological culture preservation

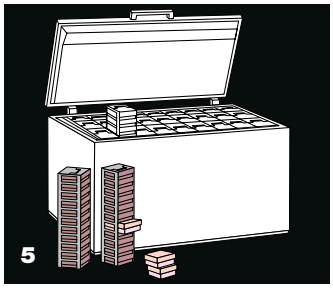
CryoInstant is an excellent preservation system for storing microbiological culture (for example fungus on sporulation phase), consisting on **2 ml cryovials** containing 25 porous beads and cryopreservative-added broth.
With these vials we can:

- Get a **perfect freezing storage system**.
- Obtain up to **25 replicates** from the original microorganism, to use them during many years
- **Ease** the **recovery** of the **stored strain** streaking an inoculated bead directly onto solid media
- **Prevent changes** and **repetitive thawing / freezing** of the rest of beads
- **Avoid** the **growth** of **ice** when recovering,
- **Improve recovery rates** of frozen cultures by adding cryopreservative to broth
- **Minimise** the **risk of cross contamination**,
- **Save space** in the freezers when storing.

The external thread cryovials are made of polypropilene (page 145). Their smooth inner surface prevents from contamination. Their caps embody a silicone washer to ensure a positive leakproof seal. Tubes and caps withstand up to **–190 ºC**.
In order to ease the classification of the samples, we offer the possibility to get cryovials with caps and beads in five different colours: every code displays caps and beads from a single and same colour (excepting code **409113/6**, which is an assortment), allowing a fast and easy identification of the samples, and providing a system whereby users are able to code different bacterial species, different samples, different laboratories,etc. And even more: with colour coded inserts (described on page 144) a further classification can be made.
Cryovials are presented in carton boxes (resistant to **–100 ºC**; dimensions: 150x150x55 mm) with 100 units; boxes are described in page 206. Each box is supplied plastic-wrapped and labelled with code reference, batch, expiration date and specifying the colour of the caps and beads.

code	beads and cap colour	case quantity	case weight	case volume
409113/1	white	100	0.53	0.002
409113/2	blue	100	0.53	0.002
409113/3	yellow	100	0.53	0.002
409113/4	red	100	0.53	0.002
409113/5	green	100	0.53	0.002
409113/6	assorted: 5 colours x 20 cryovials	100	0.53	0.002





Way of use:

1. Take the sample from the strain with a loop (please see our loops on pages 32-33)
2. Inoculate the cryovial by putting the loop in contact with the broth
3. Close the cryovial and shake it gently in order to permeate the strain into the beads
4. Extract the cryopreservative-added broth with a Pasteur pipette (see our plastic pipettes on pages 189-193)
5. Close the cryovial and take it to the freezer
6. Every time we need to reproduce the strain, we will take a bead with a loop or a forceps
7. We will put it down on a Petri dish with culture medium, attempting to put in contact all the surface of the bead with the medium

WILMUT

INNOVATIVE NEW

Solutions for cryopreservation

Wilmut offers a **wide range of biological simple storage tubes** that fit in the 96-well plate SBS standard format, and single tubes which are compatible with any freezing box format.

With volumes in between 0.5 ml and 1.2 ml and different options of codification that allows Wilmut system **adapt to the needs of any laboratory or biobank**. They are products designed and oriented exclusively to the user.

Main features:

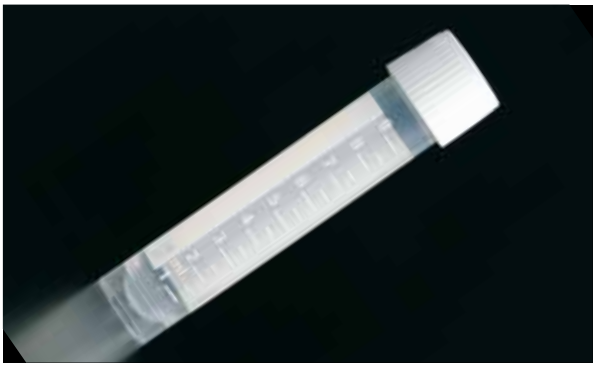
- Tubes and racks for microbiological sample storage
- It is the tube with more capacity in the minimum space: maximum optimization of the freezers (from 15 % to 75 % of space saving)
- Maximum traceability: 2D datamatrix code, legible code at the tube, and bar code in the rack
- Traceability files available at www.wilmut.es or using software management
- Big quantity of accessories: caps, lockers, pisckers, cappers, decappers, labels, scanners, etc.

For more information, see chapter 10 **Wilmut System**

Sterile cryovials

Tubes made of **autoclavable** polypropylene.
Designed for the storage of biological material at temperatures as low as **–196 °C**. (Liquid Nitrogen but in gas state).
Cryovials have printed graduations and feature a white marking area for sample identification.
Caps and tubes have both the same coefficient of expansion, which further enhances their leakproof qualities at changing temperatures.
Caps are manufactured in polyethylene* and embody a silicone O-ring that guarantees leakproof.
Colour code inserts can be fitted into the caps for identification.
All cryovials are certified RNAse, DNAse and pyrogen free.
Cryovials are sterilized by radiation and are packaged in safety-lock bags of 100. Supplied capped.

External threads:
minimize liquid retention. Non skirted versions withstand centrifugation up to **17,000 xg.**
* 10 ml cryovial (code **401410**) features a polyethylene cap which does not accept inserts.



Internal threads:
Non skirted versions withstand centrifugation up to **14,000 xg**.

Cryovials with external threads:

code	volume ml	skirt	dimensions mm*	case quantity	case weight	case volume
409105.1	1.2	yes	12.5 x 42	10 x 100	2.55	0.014
409103.1	2.0	no	12.5 x 47	10 x 100	2.70	0.016
409106.1	2.0	yes	12.5 x 49	10 x 100	2.68	0.021
409107	3.0	yes	12.5 x 71	10 x 100	3.88	0.023
409108	4.0	yes	12.5 x 77	10 x 100	3.90	0.028
409109	5.0	yes	12.5 x 92	10 x 100	4.60	0.023
401410	10.0	yes	17.0 x 84	10 x 50	2.80	0.020

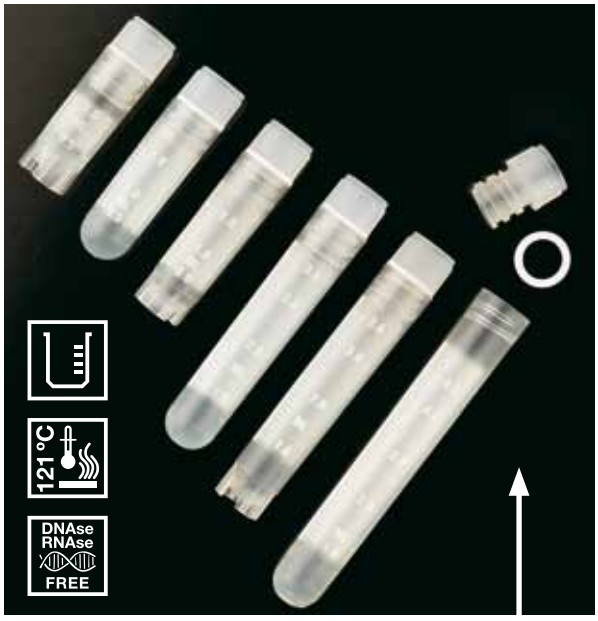
* Capped.

Cryovials with internal threads:

code	volume ml	skirt	dimensions mm*	case quantity	case weight	case volume
409001	1.2	yes	12.5 x 41	10 x 100	1.94	0.015
409002	2.0	no	12.5 x 48	10 x 100	2.22	0.016
409002.1	2.0	yes	12.5 x 49	10 x 100	2.24	0.014
409003	4.0	no	12.5 x 70	10 x 100	3.79	0.028
409003.1	4.0	yes	12.5 x 72	10 x 100	3.90	0.028
409003.2	5.0	no	12.5 x 90	10 x 100	4.60	0.024

* Capped.

See racks at page 209



Colour coded inserts

Made of polypropylene. Very convenient for colour identification in freezers, on benchtops etc.
Fit precisely into the caps of cryovials. They feature a little hole in order to help removing them from the cap. Not suitable for code **401410.**

code	colour	case quantity	case weight	case volume
409003A	blue	500	0.08	0.0004
409003AM	yellow	500	0.08	0.0004
409003R	red	500	0.08	0.0004
409003V	green	500	0.08	0.0004

Non sterile cryovials with external threads

Made of polypropylene. Designed for the storage and transportation of biological material. The external thread design provides a smooth and uniform inner surface, thus reducing the risk of contamination.
Tubes can be **autoclaved** to **121 ºC** and withstand temperatures down to **–190 ºC**. The closures and tubes are both manufactured of polypropylene having the same coefficient of expansion, which further enhances their leakproof qualities at changing temperatures.
Cryovials withstand centrifugation up to **17,000 xg**. Skirted tubes are not recommended for centrifugation.
Available with or without graduation and white band.
Caps suitable for these cryovials are supplied separately, see code **409110** and series.

Cryovials printed without graduation:

code	volume ml	skirt	dimensions mm*	case quantity	case weight	case volume
409102.1	1.2	yes	12.5 x 43	1,000	1.38	0.007
409104.1	2.0	no	12.5 x 48	1,000	1.58	0.007
409106.2	2.0	yes	12.5 x 49	1,000	1.68	0.006
409107.1	3.0	yes	12.5 x 72	1,000	2.48	0.020
409108.1	4.0	yes	12.5 x 76	1,000	2.75	0.017
409109.1	5.0	yes	12.5 x 93	1,000	3.66	0.023

* Capped

Cryovials with graduation and band:

code	volume ml	skirt	dimensions mm*	case quantity	case weight	case volume
409132	2.0	yes	12.5 x 49	1,000	2.68	0.010
409133	3.0	yes	12.5 x 72	1,000	3.77	0.010
409135	4.0	yes	12.5 x 76	1,000	3.90	0.020

* Capped

Caps for the above tubes

Made of polypropylene. Feature a long skirt and a special thread design allowing them to be removed or sealed with a single turn and assuring a better protection of the content. A silicone washer ensures a positive leakproof seal at all temperatures.
Caps are made of polypropylene having the same coefficient of expansion as the above cryovials. See the previous page for colour inserts to fit into these caps.

code	colour	case quantity	case weight	case volume
409110	natural	1,000	0.631	0.003
409110/1	blue	1,000	0.082	0.003
409110/4	red	1,000	0.802	0.003

Canes for cryovials

Made of aluminium.
Suitable for the storage of five or six 1.2 or 2.0 ml tubes in liquid nitrogen freezers such as Dewar flasks.

code	dimensions	case quantity	case weight	case volume
409120	290 mm	12	0.20	0.0001

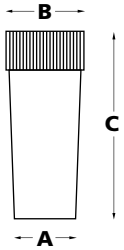

100
80
60

30 ml universal polystyrene containers (25 x 90 mm)

CE (IVD)

Polypropylene caps. 30 ml containers. These containers are manufactured with an innovative process resulting in one of the most resistant containers available on the market.
The standard cap colour is white.
Other colours can be supplied (ask for quantities).

mod.	code	description	sterile	case quantity	case weight	case volume	cases pallet
1	**309202**	polystyrene	no	400	5.50	0.045	32
2	**309222**	polystyrene individually wrapped	no	400	5.70	0.045	32
2	**309222.O**	polystyrene individually wrapped	ETHYLENE-OXIDE	400	5.70	0.045	32



Dimensions:
A: 25.1 mm; B: 30.8 mm; C: 92.5 mm. Maximum volume: 31.7 ml. Recommended volume: 25 ml.
Withstand centrifugation up to: 7,000 xg.

In an **ASEPTIC PRODUCTION**, manufacturing and packaging methods and environment are maintained to avoid or significantly reduce bacterial contamination (bioburden).
Our **EUROTUBO®** containers are injected at a temperature of **250 °C** and are automatically connected to the assembling and packaging processes, without manual intervention, so as to guarantee an aseptic production.