

- / For the max. relative centrifugal force (RCF) and the chemical/thermal resistance of our tubes please refer to the technical appendix.

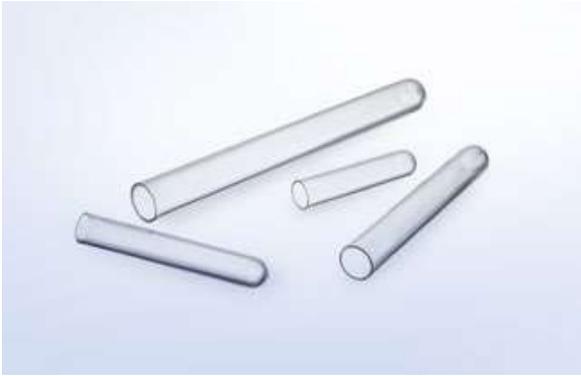
## TUBES WITHOUT CLOSURES

The range of Greiner Bio-One tubes is very versatile and meets a wide variety of different demands.

Our tubes are made of different materials: **Polystyrene (PS)** is ideally suited for optical measurements as a result of its high clarity. **Polypropylene (PP)** is re-

commended for the storage of chemical and biological samples due to its thermal, mechanical and chemical resistance. Greiner Bio-One tubes without closure are available with round bottom. In addition, it is possible to order appropriate closures in the form of grip stoppers and screw caps.

- / With round or conical bottom
- / With or without skirt
- / Available in polystyrene or polypropylene

**Tube****Polystyrene**

- / High transparency
- / Available in different sizes and packaging units

Raw material: PS, Bottom shape: round

Item no.	Height	Ø	Working volume	Nominal volume	Qty. inner / outer
112101	55 mm	12 mm	≤3 ml	4 ml	240 / 3.600
115101	75 mm	12 mm	≤4 ml	5 ml	250 / 2.000
<b>136101</b>	<b>100 mm</b>	<b>14 mm</b>	<b>≤8 ml</b>	<b>10 ml</b>	<b>1.400 / 1.400</b>
160101	100 mm	16 mm	≤10.5 ml	12 ml	1.600 / 1.600
187101	100 mm	17 mm	≤12 ml	14 ml	1.500 / 1.500
169101	152 mm	16 mm	≤18 ml	20 ml	1.500 / 1.500

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**Tube****Polypropylene**

- / Suited for sample storage
- / Thermal, chemical and mechanical stability
- / Available in different sizes and packaging units

Raw material: PP, Bottom shape: round

Item no.	Height	Ø	Working volume	Nominal volume	Qty. inner / outer
112201	55 mm	12 mm	≤3 ml	4 ml	240 / 3.600
115201	75 mm	12 mm	≤4 ml	5 ml	250 / 2.000
160201	100 mm	16 mm	≤10 ml	12 ml	- / 1.600
187201	100 mm	17 mm	≤12 ml	14 ml	1.500 / 1.500

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Revision 01	Tube, 10 ml, PS, Round Bottom	 <b>greiner bio-one</b>
	Greiner Item-No. 136101	

1.	Description / Specification	
1.1	Description	PS tube with round bottom, 10 ml Appropriate grip stopper, Cat.-No. 307321
1.2	Dimensions	See customer drawing
1.3	Volume	Working volume: 8 ml
1.4	Material / Resin	PS (Polystyrene), free of heavy metal
1.5	Colour	Clear
1.6	Sterilization	No
1.7	Quality Control	Product-Control: testing of attributive and variable characteristics in accordance with the valid specification
1.8	Other Information	For single use only

2.	Features	
2.1	Basic features	-
2.2	Temperature range	-20°C to +60°C
2.3	Autoclavability	No
2.4	Centrifugation	4000 x g: swinging-bucket rotor 5200 x g: fixed-angle rotor
2.5	Chemical Resistance	See homepage: <a href="https://www.gbo.com/en_INT/know-how-services/download-center.html">https://www.gbo.com/en_INT/know-how-services/download-center.html</a>
2.6	Shelf life	N/A
2.7	Other Information	-

3.	Packaging	
3.1	Pieces / Bag	1400
3.2	Pieces / Box	1400
3.3	Lot-No.	A YY MM XXX (manufacturing facility, year, month, consecutive SAP-No.)
3.4	Other Information	-

4.	Other Information	

Data Sheet subject to change without notice!

Prior Issue	Drawn	Approved	Released	<b>CONFIDENTIAL:</b> Information contained in this document or drawing is confidential and proprietary to Greiner Bio-One GmbH. This document may not be reproduced for any reason without written permission from Greiner Bio-One GmbH. All rights of design, invention, and copyright are reserved.
Revision	Date	Date	Date	
-	28 November 2014	28 November 2014	28 November 2014	
Date	Name	Name	Name	
-	S. Kaelberer	Dr. T. Schreiber	A. Schulz	

**DISCLAIMER:** The description of a certain product can only be considered as a guidance, because its performance ultimately depends on what the product is used for. Very often performance studies are indispensable.