

**BUFFERED PEPTONE WATER**Pre-enrichment medium for *Salmonella spp* isolation from foods according to ISO 6579.**TYPICAL FORMULA (g/L)**

| | |
|-------------------------|------|
| Tryptone | 10.0 |
| Sodium Chloride | 5.0 |
| Disodium Phosphate | 3.5 |
| Monopotassium Phosphate | 1.5 |
| Final pH= 7.0 ± 0.2 | |

DESCRIPTION

BUFFERED PEPTONE WATER is recommended by ISO 6579 as a non selective medium for the pre-enrichment phase in the procedure of *Salmonellae* isolation from foods and water to increase recovery.

PRINCIPLE

Tryptone provides amino acids and proteins. Sodium chloride maintains the osmotic balance of the medium. Disodium phosphate and monopotassium phosphate are buffering agents.

PREPARATION

Suspend 20 g of powder in 1 litre of distilled or deionized water. Heat to boiling until completely dissolved. Sterilise at 121°C for 15 minutes. Dispense in final containers.

TECHNIQUE

Aseptically add 10 g of sample to 50 ml of Buffered Peptone Water and incubate at 36+/-1°C for 18 hours. Transfer 10 ml of this inoculum to 100 ml of Muller Kauffmann Broth and incubate at 43°C for 24-48 hours. Subculture this inoculum on Brilliant Green Agar and incubate at 36+/-1°C for 18 hours.

INTERPRETATION of RESULTS

Microbial growth is indicated by turbidity of the medium.

STORAGE

10-30°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.

WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of ≥1%. The product must be used only by properly trained operators.

DISPOSAL of WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

1. Edel, W., and E.H. Kampelmacher (1973). Bull. Wild. Hlth. Org. 48: 167-174.
2. ISO 6579- Microbiology of food and animal feeding stuffs – Horizontal method for the detection of *Salmonella spp.* 2002-07-15.
3. O.M. 11/10/78: Limiti di cariche microbiche tollerabili in determinate sostanze alimentari e bevande. Gazzetta Ufficiale della Repubblica Italiana, n°346 del 13/12/78.

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PRODUCT SPECIFICATIONS

NAME
BUFFERED PEPTONE WATER

Dehydrated culture medium

STORAGE
10-30°C

PACKAGING

| Code | Content | Packaging |
|--------|---------|-----------------------------------|
| 611014 | 500 g | 500 g of powder in plastic bottle |
| 621014 | 100 g | 100 g of powder in plastic bottle |

pH OF THE MEDIUM
7.0 ± 0.2

USE

BUFFERED PEPTONE WATER is recommended by ISO 6579 as a non selective medium for the pre-enrichment phase in the procedure of *Salmonellae* isolation from foods and water to increase recovery.

TECHNIQUE

Refer to technical sheet of the product.

APPEARANCE OF THE MEDIUM

Light amber medium, clear with no significant precipitate.

SHELF LIFE

4 years

QUALITY CONTROL

- Control of general characteristics, label and print.
- Microbiological control:
Inoculum for productivity: 10-100 UFC/ml.
Inoculum for selectivity: 10^4 - 10^5 UFC/ml.
Inoculum for specificity: $\leq 10^4$ UFC/ml.
Incubation conditions: 18-48 h at $36 \pm 1^\circ\text{C}$.

| Microorganism | ATCC | Growth |
|-------------------------------|------------|--------|
| <i>Salmonella typhi</i> | ATCC 19430 | Good |
| <i>Salmonella typhimurium</i> | ATCC 14028 | Good |
| <i>Salmonella enteritidis</i> | ATCC 13076 | Good |

TABLE OF SYMBOLS

| | | | |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| LOT Batch code |  Caution, consult accompanying documents |  Manufacturer |  Contains sufficient for <n> tests |
| REF Catalogue number |  Temperature limitation |  Use by | |



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BUFFERED PEPTONE WATER – BUFERINIS PEPTONO VANDUO

PARUOŠIMAS

20 g terpės suspenduojama viename litre distiliuoto vandens. Maišant kaitinama, kol visiškai ištirps. Išpilstoma ir sterilizuojama autoklavuojant 121° C temperatūroje 15 minučių.

PANAUDOJIMAS

BUFERINIS PEPTONO VANDUO yra terpė skirta pirminiam salmonelių, kurių ieškoma maisto produktuose arba vandenyje, gausinimui. Naudojama prieš selektyvų gausinimą.

KULTŪRŲ CHARAKTERISTIKOS PO 18-24 VALANDŲ INKUBAVIMO 36+/-1° C TEMPERATŪROJE

| Mikroorganizmai | Augimas |
|------------------------------------------|---------|
| <i>Escherichia coli</i> ATCC 25922 | Geras |
| <i>Salmonelle enteritidis</i> ATCC 13076 | Geras |
| <i>Salmonella typhimurium</i> ATCC 14028 | Geras |
| <i>Staphylococcus aureus</i> ATCC 25923 | Geras |

FORMULĖ (g/litre)

| | |
|---------------------------------------|-----|
| Triptonas | 10 |
| Natrio chloridas | 5 |
| Dvipakaitis natrio fosfatas | 3,5 |
| Vienpakaitis kalio fosfatas | 1,5 |
| pH = 7,0 +/- 0,2 | |

| PRODUKTAS | KODAS | ĮPAKAVIMAS |
|---------------|--------|------------|
| BUFFERED | 611014 | 500 g |
| PEPTONE WATER | 621014 | 100 g |

DESOXYRIBONUCLEASE TEST MEDIUM

For the detection of desoxyribonuclease enzyme, mainly from staphylococci

Typical formula (g/l)

| | |
|------------------------|----|
| Tryptose | 20 |
| Desoxyribonucleic Acid | 2 |
| Sodium Chloride | 5 |
| Agar | 15 |

Directions

Suspend 42g in 1000 ml of cold distilled water, heat to boiling and autoclave at 121°C for 15 minutes. Cool to 45-50°C and pour into sterile Petri dishes. Final pH 7.3 ± 0.2

Description

Desoxyribonuclease Test Medium, prepared according to the formula of Jeffries, Hoitman and Guse, and APHA recommendations, is a non selective medium for the identification of pathogenic staphylococci, on the basis of the presence of the DNase enzyme, which breaks down the DNA present in the medium.

In 1956 Cunningham, Catlin and Garlihe demonstrated that coagulase-positive, mannitol-fermenting chromogenic strains of *Staphylococcus aureus* produce a heat stable calcium-dependent desoxyribonuclease capable of hydrolysing the 5-phosphodiesteric bonds of DNA, and this is distinguishable from other similar enzymes of different origin.

Desoxyribonuclease Test Medium helps in the differentiation and identification of non-pigmented *Serratia marcescens* (positive to DNAase reaction) from *Klebsiella-Enterobacter* (negative to DNase reaction).

A modification of the medium is to add mannitol (1% w/v) and phenol red or bromothymol blue (25mg/litre) as an indicator of mannitol fermentation. The colour change of the medium around the colonies must be read before the plates are flooded with HCl.

Technique

To carry out the test, heavily streak the agar surface with isolated strains, and incubate for 12-18 hours at 37°C. Examine the plates for colour change (if mannitol and an indicator have been added) then flood the surface of the medium with 1N HCl; clearing around the streak will indicate DNase production. HCl is bactericidal and the organisms cannot be recovered from the agar surface.

User quality assurance (37°C-24 h)

DNase positive control

S.aureus ATCC 25923

DNase negative control

E.coli ATCC 25922

Storage

Dehydrated medium: 10-30°C

User prepared plates: 7 days at 2-8°C

References

- Cunningham, L. Catlin, B.W. & M.P. di Garilhe (1956) J. Am. Chem. Soc., **78**, 4642-4645.
- Jeffries, C.D., Holtman, D.F. & Guse D.G. (1957) J. Bacteriol., **73**, 590.
- Waller, J.R., Hodel, S.L. and R.N. Nuti (1985) J. Clin. Microbiol. **21**, 195.

Packaging

4013682 Desoxyribonuclease Test Medium, 500 g (11.9 l)

DNase test medium
DESOXYRIBONUCLEASE TEST MEDIUM
Dezoksiribonukleazės enzimų aptikimui daugiausiai iš stafilokokų.

Formulė (g/ltr.):

| | |
|-------------------------------|-------------|
| Triptozė | 20.00 |
| Dezoksiribonukleininė rūgštis | 2.00 |
| Natrio chloridas | 5.00 |
| Agar | 15.00 |
| pH | 7,3 +/- 0,2 |

Paruošimas:

42,0 g terpės ištirpinama 1000 ml šalto destiliuoto vandens. Kaitinant maišyti iki užvirinimo kol visiškai ištirpsta. Autoklavuoti 15 minučių 121C temperatūroje. Ataušinti iki 45-50C ir išpilstyti į Petri lėkšteles.

Aprašymas:

DNazės terpė paruošta pagal Jeifries, Hoitman ir Guse formulę ir APHA rekomendacijas yra neselektyvi terpė daugiausiai skirta patogeniškų stafilokokų identifikavimui dėl DNazės enzimų, kurie išardo DNA, esantį terpės sudėtyje.

Koaguliazėi teigiamos, manitą fermentuojančios *Staphylococcus aureus* rūšys produkuoja karščiui stabilią kalcio išlaikomą dezoksiribonukleazę, gebančią hidrolizuoti 5-fosfodiesterinę DNA jungtį. Tai yra pagrindinis skirtumas nuo kitų panašių skirtingos kilmės enzimų.

DNazės terpė taip pat padeda diferencijuoti ir identifikuoti ne-pigmentuojančius *Serratia marcescens* (teigiama DNazės reakcija) nuo *Klebsiella-Enterobacter* (neigiama DNazės reakcija).

Terpė gali būti modifikuota pridėdant manito (Iproc.) ir fenolio raudonojo arba bromtymolio mėlio (25mg/litru), kurie yra manito fermentacijos indikatoriai. Terpės spalvos pasikeitimas aplink kolonijas turi būti stebimas prieš lėkštelių nuplovimą HCl.

Tyrimo eiga:

Vykdam testą kilpelė su paimtomis gerai išskirtomis kolonijomis užsėjama giliai įs perbraukus per terpės paviršių ir inkubuojant jas 12-18 val. 37C temperatūroje. Stebimas terpės spalvos pasikeitimas (kai į terpę yra pridėtas manitas ir indikatorius) po to terpės paviršių nuplaunamas 1N HCl tirpalu; terpės nuskaidrėjimas aplink sėjimo vietas parodo DNazės produkavimą.

Kokybės kontrolė

Mikroorganizmų charakteristikos po 24 val. inkubavimo 37C temp.

| Mikroorganizmas | DNazės reakcija |
|--------------------|-----------------|
| S.Aureus ATCC25923 | Teigiama |
| E.Coli ATCC 25922 | Neigiama |
| | |

Saugojimas:

Dehidratuota terpė: 18-27C.

Paruoštos lėkštelės 30 dienų 2-8C.

Nuorodos:

1. Cunningham, L.Catlin, B.W. & M.P. di Garilhe (1956) *J.Am.Chem.Soc.*, 78, 4642-4645
2. Jeffries, C.D., Holtman, D.F. & Guse D.G. (1957) *J.Bacteriol.*, 73, 590
3. Waller, J.R., Hodel, S.L. & R.N. Nuti (1985) *J.Clin.Microbiol.*, 21, 195

Pakuotė

4013682 Desoxyribonuclease Test Medium500g (11,9 ltr.)



IRON SULPHITE AGAR

Medium for thermophilic anaerobes determination in foods.

| | |
|--------------------------------|--------------|
| TYPICAL FORMULA | (g/l) |
| Tryptone | 10.0 |
| Sodium Sulfite | 0.5 |
| Ferric Citrate | 0.5 |
| Agar | 12.0 |
| Final pH = 7.1 ± 0.2 at 25 °C. | |

DIRECTIONS

Suspend 23.0 g of powder in 1 liter of distilled or deionized water. Heat to boiling until completely dissolved. Dispense into final tubes in amounts of 10 ml. Sterilize in autoclave at 121°C for 15 minutes.

DESCRIPTION

IRON SULPHITE AGAR is a medium for the detection of thermophilic anaerobic organism causing sulphide spoilage in foods.

TECHNIQUE

Inoculate while the medium is still fluid at 45-50°C, allow to solidify and incubate at 55-56°C for thermophilic species for 48 hours. Positive tubes will show black growths in the depth of the medium.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: beige.

Prepared medium

Appearance: clear.

Color: light amber.

Incubation conditions: 56 ± 1 °C for 48 hours.

| Microorganism | ATCC Growth | Characteristics |
|--------------------------------|-------------|-----------------|
| <i>Clostridium sporogenes</i> | 19404 good | blackening |
| <i>Clostridium perfringens</i> | 11437 good | blackening |
| <i>Escherichia coli</i> | 25922 good | |

PERFORMANCE AND LIMITATIONS

The blackening reaction is only presumptive evidence of clostridial growth. Confirmation tests must be carried out to identify the organism growing in the medium.

STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident.

REFERENCES

- Mossel, D.A.A., Golstein Brouwers G.W.M.V. and De Bruin A.S. (1959). J. Path. Bact. **78**: 290-291.
- Tanner, F.W. (1944). The microbiology of foods, 2nd ed, p. 1127.

PRESENTATION

| Product | REF | Σ |
|-----------------------------|--------|-------|
| IRON SULPHITE AGAR (19.2 l) | 611401 | 500 g |
| IRON SULPHITE AGAR (3.8 l) | 621401 | 100 g |

TABLE OF SYMBOLS

| | | | | |
|-----------------------------|-----------------------------------------|--------------|-----------------------------------|-----------------------------------------------|
| LOT Batch code | Caution, consult accompanying documents | Manufacturer | Contains sufficient for <n> tests | IVD In Vitro Diagnostic Medical Device |
| REF Catalogue number | Fragile, handle with care | Use by | Temperature limitation | Keep away from heat source |

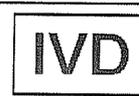


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IRON SULPHITE AGAR – GELEŽIES SULFITO AGARAS

Tai yra terpė skirta termolitiškų anaerobinių mikroorganizmų aptikimui.

PARUOŠIMAS: 26g dehidratuotos terpės ištirpinti 1000 ml distiliuoto vandens. Kaitinant užvirinti kol terpė visiškai ištirpsta. autoklavuoti prie 121C temp. 15 minučių. Prieš išpilstant gerai išmaišyti.

NAUDOJIMAS: Geležies sulfito agaras naudojamas termofiliškų anaerobinių mikroorganizmų aptikimui, dėka sulfito skaidymo maisto mėginiuose. Terpė turi būti išpilstyta po 10ml į mėgintuvėlius. Mėginį inokuliuoti giliai į terpę, kol ji yra skysta. Inkubuoti 55C temperatūroje termofiliškų mikroorganizmų aptikimui. *Desulfotomaculum nigrificans* rūšys auga ryškiai juodomis kolonijomis terpės gilumoje.

Pagal Attenborough ir Scarr'o metodą skysti cukraus mėginiai yra filtruojami per membraninį filtrą, kuris po to yra susukamas ir panardinamas į mėgintuvėlį su skysta geležies sulfito terpe (prie 50C temp.). Palaukiama, kol terpė sukietėja ir inkubuojama 56C temperatūroje. Po 48 val. inkubavimo yra skaičiuojamos juodos spalvos kolonijos ant membraninio filtro.

Ši terpė yra Cameron Sulfito agaro (rekomenduojamo NCAA) modifikacija.

Reikia atkreipti dėmesį, kad šios terpės sudėtyje yra sumažinta natrio sulfito koncentracija. Beerens'as pastebėjo, kad kai kurios *Clostridium sporogenes* rūšys netoleruoja 0,1% sulfito. Šią savybę patvirtino ir Mossel'is, kuris tyrė geležies sulfito agarą, kurio sudėtyje buvo tik 0,05% sulfito.

SAUGOJIMAS: Dehidratuotą terpę saugoti kambario temperatūroje (mažiau+25C temp.)

| | | | |
|--------------|-------------------|--------------|-----|
| SUDĖTIS: | Triptonas | 10,0 g/litre | |
| g/litre | Natrio sulfitas | | 0,5 |
| g/litre | Geležies citratas | | 0,5 |
| 15,0 g/litre | Agaras | | |
| | PH 7,1+/- 0,2 | | |

KULTŪRŲ CHARAKTERISTIKOS PO 48 VALANDŲ INKUBAVIMO 56+/-1°C TEMPERATŪROJE

| Mikroorganizmai | Augimas | Charakteristikos |
|-------------------------------------------|---------|------------------|
| <i>Clostridium sporogenes</i> ATCC 19404 | Geras | Juoduoja |
| <i>Clostridium perfringens</i> ATCC 11437 | Geras | Juoduoja |
| <i>Eschericia coli</i> ATCC 25922 | Geras | |

| PRODUKTAS | KODAS | IPAKAVIMAS | |
|-------------------------------|--------|------------|--------|
| IRON SULPHITE AGAR 100 gr. | 611401 | 500 gr. | 621401 |

NUORODOS:

1. Tanner F. W. (1944) The microbiology of Foods' 2nd ed., Garrard Press, Illinois p.1127
2. Beerens H. (1958) DSIR, Proc. 2nd Internat. Symp. Food Microb. 1957, HMSO, London, pp.235-245.
3. Mossel D.A.A., Golstein Brouwers G.W.M.V. and de Bruin A.S. (1959) J.Path Bact. 78. 290-291
4. Attenborough Sheila J. and Scarr M.Pamela (1957) J. Appl. Bact. 20. 460-466
5. Bufton A.W.J. (1959) J.Appl. Bact. 22. 278-280



COLUMBIA AGAR BASE

Medium for fastidious microorganisms isolation from clinical samples.

TYPICAL FORMULA (g/l)

| | |
|-----------------|------|
| Peptospecial | 23.0 |
| Starch | 1.0 |
| Sodium Chloride | 5.0 |
| Agar | 14.0 |

Final pH = 7.3 ± 0.2 at 25 °C.

DIRECTIONS

Suspend 43.0 g of powder in 1 liter of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize in autoclave at 121 °C for 15 minutes. Cool to 45-50 °C and aseptically add 5% defibrinated sterile sheep blood. Mix well. Dispense in petri dishes.

Columbia Agar Base can be also enriched in various way:

- with 2 vials of CNA (Staf / Strep) supplement (colistin sulphate 5 mg/vial, nalidixic acid 8 mg/vial, code 81048), each one reconstituted with 5 ml of sterile distilled water; final medium will contain colistin sulphate 10 mg/l and nalidixic acid 16 mg/l.
- with 2 vials of *Gardnerella vaginalis* supplement (gentamicin 3 mg/vial, amphotericin B 1mg/vial, nalidixic acid 15 mg/vial, code 81040), each one reconstituted with 5 ml of a 1:1 solution of ethyl alcohol and sterile distilled water; final medium will contain gentamicin 6 mg/l, amphotericin B 2 mg/l and nalidixic acid 30 mg/l.

DESCRIPTION

COLUMBIA AGAR BASE, enriched with sterile sheep blood (5%), is suitable for isolation and growth of fastidious microorganisms such as streptococci, staphylococci, pneumococci and listeriae from clinical samples.

TECHNIQUE

Inoculate the medium with the specimen streaking by a sterile loop and incubate at 36 ± 1 °C for 18-48 hours aerobically, anaerobically or under conditions of increased CO₂ (5-10%), in accordance with established laboratory procedures.

Examine plates for growth and hemolytic reactions. Four types of hemolysis on blood agar media can be described:

1. α-hemolysis is the reduction of hemoglobin to methemoglobin in the medium surrounding the colony, causing a greenish discolorization of the medium.
2. β-hemolysis is the lysis of red blood cells, producing a clear zone surrounding the colony.
3. γ-hemolysis indicates no destruction of red blood cells and no change in the color of the medium.
4. δ-hemolysis indicates a partial lysis.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: beige.

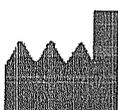
Prepared medium

Appearance: opaque.

Color: cherry red.

Incubation conditions: 36 ± 1 °C for 18-48 hours at 5-10% CO₂.

| Microorganism | ATCC | Growth | Characteristics |
|---------------------------------|-------|--------|-----------------|
| <i>Streptococcus pyogenes</i> | 19615 | good | β-hemolysis |
| <i>Streptococcus pneumoniae</i> | 6303 | good | α-hemolysis |
| <i>Staphylococcus aureus</i> | 25923 | good | β-hemolysis |
| <i>Gardnerella vaginalis</i> | 14018 | good | β-hemolysis |

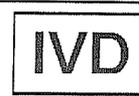


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PERFORMANCE AND LIMITATIONS

When this medium is enriched with 10% sterile sheep blood, heated at 80 °C for 10 minutes until a chocolate color is obtained, and an antibiotic mixture is added (vancomycin, colimycin, trimethoprim, amphoterycin B) it is suitable for the selective isolation of the pathogens neisseria. If used without the addition of blood, the medium is suitable for growing of *Brucella abortus*, *Yersinia pestis*, *Clostridium perfringens* and *enterobacteria*. Hemolytic reactions of some strains of Group D streptococci have been shown to be affected by differences in animal blood. Such strains are beta -hemolytic on horse and rabbit blood agar and alpha-hemolytic on sheep blood agar.

STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident.
Store prepared plates at 2-8 °C.

REFERENCES

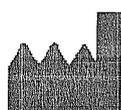
1. Ellner, P.D., C.J. Stoessel., E. Drakeford, and F. Vasi (1966). A new culture medium for medical bacteriology. Am. J.Clin. Path. 45, 502-504.
2. Isenberg, H.D. (ed.) (1992). Clinical microbiology procedures handbook, vol. 1 American Society for Microbiology, Washington, DC.

PRESENTATION

| Product | REF | Σ |
|----------------------------------|---------|----------|
| COLUMBIA AGAR BASE (11.6 l) | 610013 | 500 g |
| COLUMBIA AGAR BASE (2.3 l) | 620013 | 100 g |
| COLUMBIA AGAR BASE (116.2 l) | 6100135 | 5 Kg |
| SHEEP BLOOD DEFIBRINATED | 83296 | 50 ml |
| CNA (Staf / Strep) supplement | 81048 | 10 vials |
| Gardnerella vaginalis supplement | 81040 | 10 vials |

TABLE OF SYMBOLS

| | | | | |
|-----------------------------|-----------------------------------------|--------------|-----------------------------------|-----------------------------------------------|
| LOT Batch code | Caution, consult accompanying documents | Manufacturer | Contains sufficient for <n> tests | IVD In Vitro Diagnostic Medical Device |
| REF Catalogue number | Fragile, handle with care | Use by | Temperature limitation | Keep away from heat source |

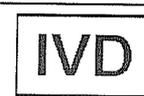


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COLUMBIA AGAR BASE – KOLUMBIJOS AGARO BAZĖ

PARUOŠIMAS

43 g terpės suspenduojama viename litre distiliuoto vandens. Kaitinant maišoma, kol visiškai ištirpsta. Sterilizuojama autoklave 121° C temperatūroje 15 minučių. Ataušinama iki 45-50°C ir pridedama 5% defibrinuoto avių kraujo. Atidžiai išmaišoma ir supilstoma į steriles Petri lėkšteles.

PANAUDOJIMAS

KOLUMBIJOS AGARO BAZĖ papildyta steriliu krauju (5%) yra skirta streptokokų, stafilokokų, pneumokokų, listerijų išskyrimui. Kai ši terpė yra papildoma 10% steriliu avių krauju, pakaitinama 80° C temperatūroje 10 minučių (kol įgauna šokoladinę spalvą) ir papildoma antibiotikais (Vancomycin, Colimycin, Trimethoprim, Amphoterycin B), tai naudojama selektyviam neiserijų išskyrimui.

Kolumbijos agarą pagrindas nepapildytas krauju, naudojamas *Brucella abortus*, *Yersinia pestis*, *Clostridium perfringens* ir visų enterobakterijų kultivavimui.

KULTŪRŲ CHARAKTERISTIKOS PO 18-48 VALANDŲ INKUBAVIMO 36+/-1° C TEMPERATŪROJE

| Mikroorganizmai | Augimas | Hemolizė |
|-------------------------------------------|---------|----------|
| <i>Staphylococcus aureus</i> ATCC 25923 | Geras | Beta |
| <i>Streptococcus pneumoniae</i> ATCC 6303 | Geras | Alpha |
| <i>Streptococcus pyogenes</i> ATCC 19615 | Geras | Beta |
| <i>Gardnerella vaginalis</i> ATCC 14018 | Geras | Beta |

Formulė (g/litre)

| | |
|------------------------------|----|
| Specialus peptonas | 23 |
| Kraskmolos | 1 |
| Natrio chloridas | 5 |
| Agaras | 14 |

pH = 7,3 +/- 0,2

| PRODUKTAS | KODAS | PAKAVIMAS |
|---------------|--------|-----------|
| COLUMBIA AGAR | 610013 | 500 g |
| BASE | 620013 | 100 g |



CAMPYLOBACTER BLOOD FREE MEDIUM BASE

Selective medium for isolating *Campylobacter jejuni*, *Campylobacter coli* and *Campylobacter lariidis* from clinical specimens.

TECHNICAL SHEET
TS610130
Rev.1 - 14.06.2011

| | |
|------------------------------|------------|
| Typical formula | g/l |
| Nutrient broth | 25.0 |
| Bacteriological charcoal | 4.0 |
| Casein hydrolysate | 3.0 |
| Sodium desoxycholate | 1.0 |
| Sodium pyruvate | 0.25 |
| Ferrous sulphate | 0.25 |
| Agar | 12.0 |
| final pH = 7.4 ± 0.2 at 25°C | |

Campylobacter CCDA supplement

1 Vial contents (each vial is sufficient for 500 ml of medium):
Cefoperazone 16.0 mg (equivalent to 32 mg/l)
Amphotericin B 5.0 mg (equivalent to 10.0 mg/l)

DIRECTIONS

Suspend 22.8 g powder in 500 ml distilled or deionized water. Heat to boiling until completely dissolved. Sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C. Aseptically add the content of 1 vial of Campylobacter CCDA supplement (ref. 81037), reconstituted with 2 ml sterile distilled water. Mix carefully. Dispense in petri dishes.

DESCRIPTION

Campylobacter Blood Free Medium Base is a medium for isolating *Campylobacter* spp. from clinical specimens. Its formulation was developed to replace blood with charcoal, ferrous sulphate and sodium pyruvate. Improved selectivity is achieved by replacing cephalosporin with cefoperazone and by incubating the plates at 36±1°C rather than 42°C. Amphotericin is added to the medium to suppress the growth of yeasts and fungi that may occur at 37°C.

TECHNIQUE

Emulsify approximately 0.5 g of the specimen in 5 ml of sterile 0.1% peptone water to form an 1:10 dilution. Inoculate onto selective medium with cotton tipped swabs so that single isolated colonies are formed. Incubate the plates in an atmosphere consisting of approximately 5-6% oxygen and 3-10% carbon dioxide for 48 hours at 36 ± 1 °C. *Campylobacter jejuni* colonies are flat and gray with an irregular edge or raise and round with a mucoid appearance. Some strains may have a green hue or a dry appearance, with or without a metallic sheen. *C. coli* strains tend to be creamy grey in color, moist, slightly raised and often produce discrete colonies. Colonies tend to swarm when initially isolated from clinical specimens.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: beige.

Prepared medium

Appearance: opaque.

Color: tan.

Incubation conditions: 36 ± 1 °C for 48 hours in microaerophilic atmosphere.

| Microorganism | ATCC | Growth | Characteristics |
|------------------------------|-------|-----------|-----------------|
| <i>Campylobacter jejuni</i> | 33291 | good | gray colonies |
| <i>Escherichia coli</i> | 25922 | inhibited | |
| <i>Staphylococcus aureus</i> | 25923 | inhibited | |
| <i>Enterococcus faecalis</i> | 19433 | inhibited | |
| <i>Proteus mirabilis</i> | 25933 | inhibited | |

STORAGE

The powder is very hygroscopic: store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date indicated on the label or until signs of deterioration or contamination are evident. Store prepared plates at 2-8°C.

REFERENCES

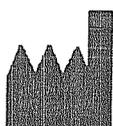
- Bolton, F.J., D.N. Hutchinson, and D. Coates (1984) J. Clin. Microbiol. 19: 169-171.
- MAFF Validated methods for the analysis of foodstuffs. J. Assoc. Publ. Analysts (1993) 29: 253-262.
- Atlas, R.M. (1997) Handbook of Microbiological Media, 2nd ed. 239-240.

PRESENTATION

| Product | Ref. | Σ |
|-----------------------------------------------|--------|----------|
| CAMPYLOBACTER BLOOD FREE MEDIUM BASE (11.2 l) | 610130 | 500 g |
| CAMPYLOBACTER BLOOD FREE MEDIUM BASE (2.2 l) | 620130 | 100 g |
| CAMPYLOBACTER CCDA supplement | 81037 | 10 vials |

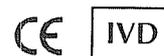
TABLE OF SYMBOLS

| | | | | |
|-----------------------------|-----------------------------------------------|-----------------------------------|-----------------------------------------|-----------------------------|
| LOT Batch code | IVD In Vitro Diagnostic Medical Device | Manufacturer | Use by | Fragile, handle with care |
| REF Catalogue number | Temperature limitation | Contains sufficient for <n> tests | Caution, consult accompanying documents | Keep away from heat sources |



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CAMPYLOBACTER BLOOD FREE (CCDA) MEDIUM BASE - BEKRAUJO AGARO CAMPYLOBAKTERIJOMS PAGRINDAS

Selektyvi terpė skirta Campylobacter jejuni, Campylobacter coli ir Campylobacter laridis, išskyrimui.

FORMULĖ (gr. litre)

| | |
|-----------------------------------|------|
| Nutrient Broth | 25 |
| Bacteriological carcoal | 4,0 |
| Casein Hydrolysate | 3,0 |
| Sodium Desoxycholate | 1 |
| Sodium Pyruvate | 0,25 |
| Ferrous sulphate | 0,25 |
| Agar | 12 |

pH = 7,4 +/- 0,2 prie 25C temp.

CAMPYLOBACTER CCDA SUPPLEMENT - PRIEDAS

1 buteliukas priedo skirtas 500ml terpės paruošti.

Sudėtis: Cefoperazone 16mg (ekvivalentas 32mg/l); Amphotericin B 5mg (ekvivalentas 10mg/l).

PARUOŠIMAS

22,8 gr. terpės ištirpinama 500ml destiliuoto vandens. Maišant kaitinama iki užvirimo, kol visiškai ištirpsta. Sterilizuojama autoklave 121 °C temperatūroje 15 minučių. Ataušinama iki 45-50C temp. Aseptiškai pridedama 1 buteliukas Campylobacter CCDA priedo (kodas 81037), ištirpinto 2 ml destiliuoto vandens. Atidžiai išmaišome. Paruošta terpė išpilstoma į Petri lėkšteles.

PANAUDOJIMAS

Campylobacter Blood free terpė yra selektyvi, skirta Campylobacter spp. išskyrimui klinikiniuose mėginiuose. Terpės formuluotė sukomponuota taip, kad pakeisti kraują anglimi, geležies sulfatu ir natrio pyruvatu. Didelis selektyvumas sukuriamas pakeičiant cefazoliną cefoperazonu ir inkubuojant lėkšteles 36+/-1C temp. Amfotericinas priedamas siekiant nuslopinti mieliagrybių augimą, kuris gali atsirasti prie 37C temperatūros.

TECHNIKA

0,5 g mėginio išmaišomi 5 ml 0,1% peptono vandens paruočiant 1:10 tirpalą.

Inokuliuoti paruoštą tirpalą sterilaus tamponėlio pagalba ant selektyvios terpės paviršiaus taip, kad formuotųsi atskiros kolonijos. Lėkšteles inkubuoti nurodytose atmosferos sąlygomis: 5-6% deguonies; 3-10% anglies dioksido. Inkubuoti 48 val. 36+/-1 C temp.

KOLONIJŲ CHARAKTERISTIKOS

Campylobacter jejuni kolonijos auga plokščiomis pilkomis netaisyklingos formos kolonijomis arba iškilėmis ir apvaliomis, gleivėtomis kolonijomis. Kai kurios gentys gali augti žalsvo atspalvio kolonijomis su arba be metalinio blizgesio. Campylobacter coli kolonijos auga kremiškai pilkomis truputį iškilusiomis kolonijomis. Kolonijos turi tendenciją augti būriais, kai mėginys yra paimtas iš pirminės klinikinės medžiagos.

KOKYBĖS KONTROLĖ

Campylobacter jejuni ATCC33291 – geras augimas, pilkos kolonijos

Escherichia coli ATCC25922 – slopinamos.

Staphylococcus aureus ATCC25923 - slopinamas

Enterococcus faecalis ATCC19433 - slopinamas

Proteus mirabilis ATCC25933 - slopinamas

PAKUOTĖS

| PRODUKTAS | KODAS | PAKUOTĖ |
|--------------------------------------|--------|---------|
| Campylobacter Blood Free Medium Base | 610130 | 500g |
| Campylobacter Blood Free Medium Base | 620130 | 100g |
| Campylobacter CCDA supplement | 610130 | 10 but. |



CAMPYLOBACTER CCDA Supplement

ENGLISH

Selective supplement for the enrichment of CAMPYLOBACTER BLOOD FREE MEDIUM BASE medium for the isolation of *Campylobacter jejuni*, *C. coli* and *C. laridis*.

DESCRIPTION

CAMPYLOBACTER CCDA Supplement is a selective supplement for the isolation of *Campylobacter jejuni*, *C. coli* and *C. laridis*, made of a freeze-dried mixture of Cefoperazone and Amphotericin B. CAMPYLOBACTER CCDA Supplement is used for the selective enrichment of CAMPYLOBACTER BLOOD FREE MEDIUM BASE medium code 610130 r 620130.

KIT CONTENTS

Each kit contains:

- 10 bottles of freeze-dried CAMPYLOBACTER CCDA SUPPLEMENT
- 1 instruction sheet

PRINCIPLE OF THE METHOD

CAMPYLOBACTER CCDA Supplement is based on the original formulation described by Bolton and others; an increase of selectivity was obtained by the substitution of Cefazolin with Cefoperazone from the original formulation. Amphotericin B is active against micetes. More recent studies demonstrated that a higher percentage of isolation of *Campylobacter* is obtainable by the incubation of plates at 37 °C rather than at 42 °C.

COMPOSITION

| CAMPYLOBACTER CCDA Supplement | | |
|-------------------------------|------------------|-----------------------|
| | Content / bottle | Content / l of medium |
| Cefoperazone | 16.0 mg | 32.0 mg |
| Amphotericin B | 5.0 mg | 10.0 mg |

TEST PROCEDURE

1. Reconstitute aseptically the content of one bottle of CAMPYLOBACTER CCDA Supplement with 5 ml of sterile distilled water. Shake until completely dissolved, avoiding foam formation.
2. Add aseptically the entire content of one bottle (5 ml) to 500 ml of the medium CAMPYLOBACTER BLOOD FREE MEDIUM BASE 610130 or 620130 autoclaved and cooled at 45-50 °C.
3. Mix with care.
4. Distribute into Petri dishes.

TECHNIQUE AND INTERPRETATION OF THE RESULTS

Refer to the technical documentation for CAMPYLOBACTER BLOOD FREE MEDIUM BASE 610130 or 620130.

QUALITY CONTROL

1. Control of the appearance: freeze-dried product, light yellow colour.
2. Microbiological control.

Prepare plates using as base the medium CAMPYLOBACTER BLOOD FREE MEDIUM BASE 610130 or 620130 enriched with *Campylobacter* CCDA supplement (1 bottle in 500 ml of medium).

Plates are inoculated with the strains indicated in the microbiological control table.

Incubation conditions: 48 h at 36 ± 1 °C, in atmosphere of microaerophilic for *Campylobacter*.

Microbiological control:

| | Control strains | Growth |
|------------------------------|-----------------|-----------|
| <i>Campylobacter jejuni</i> | ATCC 33291 | Good |
| <i>Candida albicans</i> | ATCC 10231 | Inhibited |
| <i>Staphylococcus aureus</i> | ATCC 25923 | Inhibited |

PRECAUTIONS

The product CAMPYLOBACTER CCDA Supplement is classifiable as hazardous under current legislation; it is recommended that the Safety Data Sheet be consulted on its use. CAMPYLOBACTER CCDA Supplement is a selective supplement to be used only for *in vitro* diagnostic use. It is intended for use in a professional environment and must be used in the laboratory by properly trained personnel, using approved asepsis and safety methods for handling pathogenic agents.

STORAGE

Store CAMPYLOBACTER Skirrow Supplement at 2-8 °C in its original packaging. In such conditions CAMPYLOBACTER Skirrow Supplement will remain valid until the expiry date indicated on the label. Do not use beyond that date. Eliminate without using if there are signs of deterioration.

REFERENCES

- Bolton, F.J., Hutchinson, D.N. and Coates, D. (1984) J. Clin. Microbiol. 19: 169-171.
- Hutchinson, D.N., and Bolton, F.J. (1984). J. Clin. Path. 34: 956-957.
- Bolton, F.J., Hutchinson, D.N. and Parker G. (1988). Eur. J. Clin. Microbiol. Infect. Dis. 7: 155-160.
- MAFF Validated methods for the analysis of foodstuffs: method for the detection of thermotolerant *Campylobacter* in foods (v30) j. Assoc. Publ. Analysts (1993) 29: 253-262.
- Association of Official Analytical Chemists. 1995. Bacteriological analytical manual, 8th Ed.

PRESENTATION

| | | |
|-------------------------------|-------|------------|
| Product | REF | |
| CAMPYLOBACTER CCDA Supplement | 81037 | 10 bottles |

One bottle is sufficient to prepare 500 ml of medium.

TABLE OF SYMBOLS

| | | | | |
|------------------------------------|---------------------------|--------------|-----------------------------------------|------------------------|
| In Vitro Diagnostic Medical Device | Do not reuse | Manufacturer | Contains sufficient for <n> tests | Temperature limitation |
| Catalogue number | Fragile, handle with care | Use by | Caution, consult accompanying documents | LOT Batch code |



LIOFILCHEM Bacteriology Products

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Rev.0 / 06.04.2005

Gamintojas: LIOFILCHEM Srl. (Italija)
Tiekėjas: UAB "Biometrija", Rygos g. 15, LT- 05245, Vilnius

MAC CONKEY SORBITOL AGAR – MAC CONKEY AGARAS SU SORBITU

PARUOŠIMAS

51,5 g terpės suspenduojama viename litre distiliuoto ir dejonizuoto vandens. Kaitinant maišoma, kol visiškai ištirpsta. Sterilizuojama autoklavuojant 121° C temperatūroje 15 minučių. Atšaldoma iki 45-50° C temperatūros ir išpilstoma į Petri lėkšteles.

PANAUDOJIMAS

MAC CONKEY AGARAS SU SORBITU yra terpė naudojama *Escherichia coli* serotipų 001 ir 055 izoliavimui ir diferencijavimui. Taip pat terpė naudojama *Escherichia coli* 0157 nustatymui, kuri yra hemoraginio kolito sukėlėjas. Beveik visi *Escherichia coli* kamienai fermentuoja sorbitą, todėl jų kolonijos ant šio agaro avietinės spalvos. *Escherichia coli* 0157 sorbito nefermentuoja, todėl jos kolonijos yra bespalvės.

KULTŪRŲ CHARAKTERISTIKOS PO 24-48 VALANDŲ INKUBAVIMO 36+/-1° C TEMPERATŪROJE

| Mikroorganizmai | Augimas | Kolonijų spalva | Tulžies druskos |
|---------------------------------------------|--------------------|-----------------|-----------------|
| <i>Escherichia coli</i> ATCC 25922 | Geras | Raudona | + |
| <i>Escherichia coli</i> 0157: H7 ATCC 35150 | Geras | Bespalvė | - |
| <i>Enterococcus faecalis</i> ATCC 29212 | Ryškiai slopinamas | | |

FORMULĖ (g/litre)

| | |
|----------------------|-------|
| Peptonas | 17 |
| Peptonas Proteose | 3 |
| Sorbitas | 10 |
| Tulžies druska Nr. 3 | 1,5 |
| Natrio chloridas | 5 |
| Neutralus raudonis | 0,03 |
| Kristalo violetas | 0,001 |
| Agaras | 15 |

pH = 7,1 +/- 0,2

| PRODUKTAS | KODAS | IPAKAVIMAS |
|--------------------------|--------|------------|
| MAC CONKEY SORBITOL AGAR | 610108 | 500 g |
| | 620108 | 100 g |



MAC CONKEY SORBITOL AGAR

Selective medium for *Escherichia coli* O157: H7 isolation.

| TYPICAL FORMULA | (g/l) |
|------------------|-------|
| Peptone | 17.0 |
| Proteose Peptone | 3.0 |
| Bile Salts n°3 | 1.5 |
| Sodium Chloride | 5.0 |
| D-Sorbitol | 10.0 |
| Agar | 15.0 |
| Neutral Red | 0.03 |
| Crystal Violet | 0.001 |

Final pH = 7.1 ± 0.2 at 25 °C.

DIRECTIONS

Suspend 51.5 g of powder in 1 liter of distilled or deionized water. Heat until completely dissolved. Sterilize in autoclave at 121 °C for 15 minutes. Cool at 45-50 °C. Dispense into sterile Petri dishes. Mac Conkey Sorbitol Agar may be used without autoclave sterilization if the plates are to be used on the day of preparation. Boil the medium 2-3 minutes before pouring into Petri dishes.

DESCRIPTION

MAC CONKEY SORBITOL AGAR is a selective and differential medium, with sorbitol, used for isolating and differentiating *E. coli* O157.

TECHNIQUE

Inoculate the plates spreading the specimen onto their surface using a sterile loop. Incubate at 36 ± 1°C for 18-24 hours. Sorbitol-fermenting organisms produce pink colonies, organisms that do not ferment sorbitol, such as O157: H7, are colorless.

QUALITY CONTROL

Dehydrated medium

Appearance: free flowing, homogeneous.

Color: pinkish beige.

Prepared medium

Appearance: slightly opalescent.

Color: reddish purple.

Incubation conditions: 36 ± 1°C for 24-48 hours.

| Microorganism | ATCC | Growth | Color | Bile Salts |
|---------------------------------|-------|--------------------|-----------|------------|
| <i>Escherichia coli</i> | 25922 | good | red | + |
| <i>Escherichia coli</i> O157:H7 | 35150 | good | colorless | - |
| <i>Enterococcus faecalis</i> | 29212 | markedly inhibited | | |

PERFORMANCE AND LIMITATIONS

The color of sorbitol-positive colonies can fade, making them hard to distinguish from sorbitol-negative colonies. Upon prolonged incubation strains of *E. coli* O157: H7 can ferment sorbitol. The sole use of this medium can cause the microbiologist to miss other microorganisms that may be pathogenic.

STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident.

Store prepared plates at 2-8°C.

REFERENCES

- Adams, S. (1991). *Clinical Lab Science* **4(1)**: 19-20.
- Rappaport, F., and E. Henig. (1952). *J. Clin. Pathology* **5**: 361-362.

PRESENTATION

| Product | REF | |
|----------------------------------|--------|-------|
| MAC CONKEY SORBITOL AGAR (9.7 l) | 610108 | 500 g |
| MAC CONKEY SORBITOL AGAR (1.9 l) | 620108 | 100 g |

TABLE OF SYMBOLS

| | | | | |
|-----------------------------|-----------------------------------------|--------------|-----------------------------------|-----------------------------------------------|
| LOT Batch code | Caution, consult accompanying documents | Manufacturer | Contains sufficient for <n> tests | IVD In Vitro Diagnostic Medical Device |
| REF Catalogue number | Fragile, handle with care | Use by | Temperature limitation | Keep away from heat source |

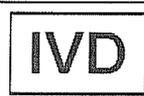


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MUELLER HINTON AGAR

Medium for susceptibility test (Kirby-Bauer method).

TYPICAL FORMULA (g/L)

| | |
|---------------------------|------|
| Meat Extract | 2.0 |
| Casamino Acids, Technical | 17.5 |
| Starch | 1.5 |
| Agar | 15.0 |
| Final pH 7.3 ± 0.1 | |

DESCRIPTION

MUELLER HINTON AGAR is used for antimicrobial susceptibility testing of rapidly growing aerobic microorganisms by the disk diffusion technique.

PRINCIPLE

Casamino acids and meat extract are a source of amino acids, nitrogen, minerals, vitamins, carbon and other factors which increase the growth of microorganisms. Starch acts as a protective substance against toxic molecules which can be present in the medium. Hydrolysis of starch during sterilization supplies a little amount of glucose which represents a source of energy. Agar is the solidifying agent. Kirby-Bauer method is based on the diffusion, through the agar, of antimicrobial substances which soaks paper disks: microorganism growth shows an inhibition halo around the disk and the diameter of the halo is correlated to the Minimal Inhibiting Concentration (MIC).

PREPARATION

Suspend 36.0 g of powder in 1 litre of distilled or deionized water. Heat to boiling and shake until completely dissolved. Sterilize in autoclave at 121°C for 15 minutes. Dispense in final containers.

TECHNIQUE

Transfer 4-5 colonies in an appropriate broth.

Place it in a 37°C incubator until an opacity is obtained equivalent to the standard opacity of 0.5 on the MacFarland scale. Introduce a sterile swab into the inoculum and inoculate the agar passing 2 or 3 times onto the entire surface.

Press the disk containing the antimicrobial on the agar surface.

Incubate at 36±1°C for 18 hours, measure the inhibition zone with a compass and compare to the NCCLS recommended zone ranges.

INTERPRETATION OF RESULTS

Compare obtained values of inhibition halo diameter with the values reported on NCCLS M100(M2) document.

STORAGE

10-30°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.

WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of ≥1%. The product is designed for *in vitro* diagnostic use and must be used only by properly trained operators.

DISPOSAL of WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

1. Bauer et al. (1966). J. Clin. Pathol. 45:493-496.
2. Mueller, J.H., and Hinton. 1941. Proc. Soc. Exp. Biol. Med. 48: 330-333.
3. NCCLS. Performance standards for susceptibility testing; Twelve Informational Supplement. NCCLS Document M100-S12, January 2002.



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PRODUCT SPECIFICATIONS

NAME
MUELLER HINTON AGAR

PRESENTATION
Dehydrated culture medium

STORAGE
10-30°C

PACKAGING

| Code | Content | Packaging |
|---------|---------|-------------------------------------|
| 610033 | 500 g | 500 g of powder in plastic bottle |
| 620033 | 100 g | 100 g of powder in plastic bottle |
| 6100335 | 5 kg | 5 kg of powder in plastic container |

pH OF THE MEDIUM

7.3 ± 0.1

USE

MUELLER HINTON AGAR is used for antimicrobial susceptibility testing of rapidly growing aerobic microorganisms by the disk diffusion technique.

TECHNIQUE

Refer to technical sheet of the product.

APPEARANCE OF THE MEDIUM

Amber medium, slightly opalescent.

SHELF LIFE

4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Sterility control
7 days at 25 ± 1°C, in aerobiosis
7 days at 36 ± 1°C, in aerobiosis
- Microbiological control
Incubation conditions: 18-24 h at 36 ± 1°C

| Microorganism | | Growth | Characteristics |
|------------------------------|------------|--------|--------------------|
| <i>Enterococcus faecalis</i> | ATCC 29212 | Good | White colonies |
| <i>Escherichia coli</i> | ATCC 25922 | Good | Colorless colonies |
| <i>Proteus mirabilis</i> | ATCC 25933 | Good | Colorless colonies |
| <i>Staphylococcus aureus</i> | ATCC 25923 | Good | White colonies |

TABLE of SYMBOLS

| | | | |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
|  IVD In vitro Diagnostic Medical Device |  LOT Batch code |  Manufacturer |  Contains sufficient for <n> tests |
|  REF Catalogue number |  Temperature limitation |  Use by |  Caution, consult accompanying documents |



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MUELLER HINTON AGAR – MUELLER HINTON AGARAS

PARUOŠIMAS

36 g terpės suspenduojama viename litre distiliuoto vandens. Maišant kaitinama, kol visiškai ištirpsta. Sterilizuojama autoklave 121° C temperatūroje 15 minučių. Vengti perkaitinimo.

PANAUDOJIMAS

MUELLER HINTON AGARAS - terpė skirta testuoti mikroorganizmų jautrumą antibiotikams. Atitinka NCCLS standartą M6-A divalenčių Mg ir Ca jonų koncentracijai ir timino bei timidino kiekiui.

KULTŪRŲ CHARAKTERISTIKOS PO 18 VALANDŲ INKUBAVIMO 36+/-1° C TEMPERATŪROJE

| Mikroorganizmas | Augimas |
|------------------------------------------|---------|
| <i>Escherichia coli</i> ATCC 25922 | geras |
| <i>Staphylococcus aureus</i> ATCC 25923 | geras |
| <i>Enterococcus faecalis</i> ATCC 29212 | geras |
| <i>Pseudomonas aeruginosa</i> ATCC 27853 | geras |

FORMULĖ (g/litre)

| | |
|------------------|------|
| Mėsos ekstraktas | 2,0 |
| Kazeino rūgštus | 17,5 |
| Krakmolas | 1,5 |
| Agaras | 15 |

pH = 7,3 +/- 0,1

| PRODUKTAS | KODAS | ĮPAKAVIMAS |
|---------------------|--------|------------|
| MUELLER HINTON AGAR | 610033 | 500 g |
| | 620033 | 100 g |



PEPTONE WATER

Medium for indole production detection recommended by ISO 7251.

TYPICAL FORMULA (g/l)
Peptone 10.0
Sodium Chloride 5.0
Final pH = 7.2 ± 0.2 at 25 °C.

DIRECTIONS

Suspend 15.0 g of powder in 1 liter of distilled or deionized water. Heat until completely dissolved. Dispense into final containers provided with Durham tubes. Sterilize in autoclave at 121°C for 15 minutes.

DESCRIPTION

PEPTONE WATER is used for cultivating non fastidious organisms and for performing the indole test as recommended by ISO 7251.

TECHNIQUE

Transfer the sample into a tube. Incubate at 36 ± 1°C for 24 ± 3 hours. Incubation at 44 °C for 24 hours is advisable for detecting the indole production in the confirmation test for fecal coliform or *E. coli*. After incubation add 1 ml of Kovac's Reagent. The formation of a red-violet ring indicates a positive reaction. A yellow-brown ring indicates a negative reaction.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: cream-white to light tan.

Prepared medium

Appearance: clear to very slightly opalescent.

Color: light amber.

Incubation conditions: 36 ± 1°C for 24 ± 3 hours.

| Microorganism | ATCC | Growth | Indole Reaction |
|------------------------------|-------|--------|-----------------|
| <i>Escherichia coli</i> | 25922 | good | + |
| <i>Klebsiella pneumoniae</i> | 13883 | good | - |

PERFORMANCE AND LIMITATIONS

Medium is pink in colour when hot but becomes colorless upon cooling.

STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared tubes at 2-8 °C.

REFERENCES

1. ISO 7251 Microbiology-General guidance for enumeration of *E. coli* – MPN Technique. 1993-12-15.
2. O.M. 11/10/78: Limiti di cariche microbiche tollerabili in determinate sostanze alimentari e bevande. Gazzetta Ufficiale della Repubblica Italiana, n°346 del 13/12/78.



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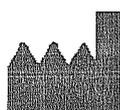


PRESENTATION

| | | |
|------------------------|--------|-------|
| Product | REF | |
| PEPTONE WATER (33.3 l) | 610038 | 500 g |
| PEPTONE WATER (6.6 l) | 620038 | 100 g |

TABLE OF SYMBOLS

| | | | | | |
|-----|------------------|-----------------------------------------|--------------|-----------------------------------|-----------------------------------------------|
| LOT | Batch code | Caution, consult accompanying documents | Manufacturer | Contains sufficient for <n> tests | IVD <i>In Vitro</i> Diagnostic Medical Device |
| REF | Catalogue number | Fragile, handle with care | Use by | Temperature limitation | Keep away from heat source |

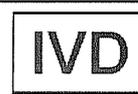


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PEPTONE WATER – PEPTONO VANDUO

PARUOŠIMAS

15 g terpės suspenduojama viename litre distiliuoto vandens. Kaitinant maišoma, kol visiškai ištirpsta ir sterilizuojama autoklavuojant 121° C temperatūroje 15 minučių.

PANAUDOJIMAS

PEPTONO VANDUO yra terpė turinti savo sudėtyje didelį kiekį triptofano ir skirta tam tikrų bakterijų rūšių indolo susidarymo nustatymui. Sugebėjimas metabolizuoti triptofaną ir produkuoti indolą yra nustatomas po inkubacijos pridėjus 1ml Kovac's reagento. Teigiamą reakciją rodo susidaręs raudonai violetinės spalvos žiedas. Jei geltonai rudos spalvos žiedas- reakcija neigiama .

KULTŪRŲ CHARAKTERISTIKOS PO 24+/- 3 VALANDŲ INKUBAVIMO 36+/- 1° C TEMPERATŪROJE

| Mikroorganizmai | Augimas | INDOLAS |
|----------------------------------------|---------|---------|
| <i>Escherichia coli</i> ATCC 25922 | Geras | + |
| <i>Klebsiela pneumoniae</i> ATCC 13883 | Geras | - |

FORMULĖ (g/litre)

| | |
|------------------|----|
| Peptonas | 10 |
| Natrio chloridas | 5 |

pH = 7,2 +/- 0,2

| PRODUKTAS | KODAS | ĮPAKAVIMAS |
|--------------|--------|------------|
| PETONE WATER | 610038 | 500 g |
| | 620038 | 100 g |

PHARMACOPOEIA DILUENT

Buffered sodium chloride peptone solution according to European Pharmacopoeia

TYPICAL FORMULA (g/l)

| | |
|---------------------------------------|------|
| Potassium Dihydrogen Phosphate | 3.56 |
| Disodium Hydrogen Phosphate Anhydrous | 5.76 |
| Sodium Chloride | 4.30 |
| Tryptone | 1.00 |

DIRECTIONS FOR POWDERED MEDIUM

Suspend 14.6g in 1000ml of cold distilled water. Heat to dissolve, distribute and sterilise by autoclaving at 121°C for 15 minutes. If required add the suitable neutralising compounds as suggested below.

Final pH 7.0 ± 0.1

DESCRIPTION

Pharmacopoeia Diluent corresponds to the liquid medium recommended by EP 3rd Ed (Buffered sodium chloride peptone solution) as general-purpose diluent for microbiological analysis. To this basal medium several compounds may be added to neutralise the activity of disinfectants. The typical neutralising diluent recommended by EP has the following formulation:

| | |
|-------------------------------------------|---------|
| Buffered sodium chloride peptone solution | 1000 ml |
| Polysorbate (Tween™) 80 | 30 g |
| Lecithin (egg) | 3 g |
| Hystidine HCl | 1 g |

If required the concentration of Polysorbate 80 and lecithin may be increased or other neutralising compounds can be used according to the following recommendations:

| Type of antimicrobial agent | In-activator | Concentration |
|-------------------------------|------------------------|------------------|
| Phenolics | Sodium lauryl sulphate | 4 g/l |
| | Tween 80 + Lecithin | 30 g/l + 3 g/l |
| | Egg yolk | 5 ml/l – 50 ml/l |
| Organo - mercurals | Sodium thioglycolate | 0,5 g/l – 5 g/l |
| Halogens | Sodium thiosulphate | 5 g/l |
| Quaternary ammonium compounds | Egg yolk | 5 ml/l – 50 ml/l |
| Aldheides | Saponin + cisteine HCl | 3 % + 0,1 % |

If a ready to use medium is required, see the technical sheet of EP Neutralising Diluent (ref. n° 5113952 -flasks, ref. n° 521395 -tubes).

TECHNIQUE

Homogenise the sample and/or prepare decimal dilutions of the sample using the diluent prepared as described. Leave at room temperature for 30-60 minutes. Inoculate the suitable culture media.

Storage

Dehydrated medium: 10-30°C

User prepared medium: 1 month at 2-8°C

REFERENCEEuropean Pharmacopoeia (EP) 3rd Edition, 2001 Supplement**PACKAGING**

| | | |
|---------|-----------------------|----------------|
| 4013951 | Pharmacopoeia Diluent | 100 g (6.8 l) |
| 4013952 | Pharmacopoeia Diluent | 500 g (34.2 l) |
| 4013954 | Pharmacopoeia Diluent | 5 kg (342 l) |

BUFFERED SODIUM CHLORIDE PEPTONE SOLUTION PHARMACOPEA DILUENT

Buferinis druskos peptono tirpalas pagal Europos Farmakopėjos reikalavimus.

Formulė (g/ltr.):

| | |
|---------------------------------------|-------------|
| Potassium Dihydrogen Phosphate | 3.56 |
| Disodium Hydrogen Phosphate Anhydrous | 5.76 |
| Sodium Chloride | 4.30 |
| Tryptone | 1,00 |
| pH | 7,0 +/- 0,1 |

Paruošimas:

14,6 g terpės ištirpinama 1000 ml šalto destiliuoto vandens. Kaitinant maišyti iki užvirinimo kol visiškai ištirpsta. Autoklavuoti 15 minučių 121C temperatūroje. Jeigu reikalinga pridėti papildomai neutralizuojančių komponentų.

Aprašymas:

Buferinis druskos peptono tirpalas pagamintas pagal EP 3-čio leidimo (EP 3rd Edition) reikalavimus ir yra pagrindinio panaudojimo tirpalas mikrobiologiniams tyrimams. Į bazinę terpės sudėtį gali būti pridėti atitinkami priedai, neutralizuojantys dezinfektantų aktyvumą. Tipiškas neutralizuojantis tirpalas pagal EP rekomendacijas yra sekančios formulės:

| | |
|------------------------------------|--------|
| Buferinis druskos peptono tirpalas | 1000ml |
| Polysorbatas (Tween80) | 30g |
| Lecitinas (kiaušinis) | 3g |
| Histidinas HCl | 1g |

Jeigu reikalinga Polysorbato 80 ir lecitino koncentracijos gali būti padidintos arba kitų neutralizuojančios dalys naudojamos pagal rekomendacijas, pateiktas lentelėje:

| Antimikrobinio agento tipas | In-aktyvatorius | Koncentracija |
|-----------------------------------|---------------------------|------------------|
| Fenoliai | Natrio lauryl sulfatas | 4 g/l |
| | Tween80 + Lecithin | 30 g/l + 3 g/l |
| | Kiaušinio trynys | 5 ml/l – 50 ml/l |
| Organiniai gyvsidabrio preparatai | Natrio tioglikolatas | 0,5 g/l – 5 g/l |
| Halogenai | Natrio tiosulfatas | 5 g/l |
| Ketvirtiniai amonio komponentai | Kiaušinio trynys | 5 ml/l – 50 ml/l |
| Aldehydai | Saponinas + cisteinas HCl | 3% + 0,1% |

Tyrimo eiga:

Homogenizuoti tiriamą mėginį ir/arba paruošti dešimtainį tirpalą naudojant tirpalą, kaip aprašyta aukščiau. Palaikyti kambario temperatūroje 30-60 min. Inokuliuoti mėginį ant atitinkamos terpės.

Saugojimas:

Dehidratuota terpė: 10-30C.

Paruoštas tirpalas 30 dienų 2-8C.

Nuorodos:

1- European Pharmacopeia (EP) 3rd Edition, 2001 Supplement.

Pakuotės

| | |
|-----------------------------------|------|
| 4013951 Pharmacopea diluent | 100g |
| 4013952 Pharmacopea diluent | 500g |
| 4013954 Pharmacopea diluent | 5kg |