Laboratorios MICROKIT
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SUPPLEMENTS AND OTHER COMPLEMENTARY REACTIVES

We compile in this document all reactives and supplements which don´t need monographic brochure. Among them there are antibiotics and other selective agents to add to base mediums, chromogénic substrate,and other reactives. Most of them need the follow 8 special comments:

1- The different strains of microrganism vary their answers to differents selective supplements, matter which you must bear in mind to choose differents concentration if you don´t wish obtain false negatives from mix cultures.

2- Differents base medium can act different with a same supplement, same that differents supplements can act different with a same base medium. Culture mediums, with or without supplements, are chaotic mixing which you need a lot of experience to achieve a result. For that reason, it is not advisable mix supplements in mediums don´t advisable for the producer, same as it is not advisable mix mediums from one producer with supplements from another producer.

3- A lot of supplements are photosensitive and thermolabile. Although they are keeped at darkness and at the fridge, when you reconstitute prepared medium can reappear the problem, Muchos suplementos son fotosensibles y termolábiles. Aunque se conserven en la oscuridad y en nevera, al reconstituir el medio preparado puede reaparecer el problema, for that reason you have to control their final activity.

4- Some components are toxics for the skin, mucous(eyes, lips, throat…) so you must handle with gloves, mask, glasses and a lot of caution. The most important are Sodium azide , Basic fucsine and Sodium selenite, that in MICROKIT are included with base medium (KAA, KF, EVA Litsky, Rothe, ENDO, Selenito Cystina) to avoid its handle.

5- It is important make sure a goob mix of base medium with the supplements, because it can appears at a very low concentrations and its heterogeneous spread would be a big mistake.

6- You must used only material (spatula, container, balance,…) clean, because of any impurity can affect the final results.

7- All sterile supplement must be handle with caution to avoid contamination.

8- All supplement no sterile must sterilize to prepare culture mediums, with two possibilities:

A) If it is not thermolabile, adding to the base medium with water before autoclave.

B) If it is thermolabile, adding bidestiled water, shaking till complet disolution and sterilizing everything by filtartion (better with syringe and sterile filter of frame, which finish in a needle directlly at the final sterile container. So, the probability of mistake is very lower than sterilization of higher volume with funnel).

Bidestiled water sterile/no sterile.Keep: 4-25ºC.

Deal with bidestiled water of high quality that MICROKIT use in all prepared mediums and we recommend to all of our customers of dehidrated mediums (our supplier, an important pharmaceutical company, supply this product even as injectable- sterile-, but we DON´T supply this although at the original label say it). It is amazing the bad quality that other waters (destiled for cars, destiled at some laboratories from running water…) contribute to other culture mediums, with rainfalls, displacement important at the pH, turnnings of colorings… And don´t speak about unacceptable faucet water, even in zonez with high quality of thids water as all limestone and coastal zone of Spain. Reference KBB002. Also in princkable bottles of 100 ml (RPL001), Tubes of 9 ml (TPL001) and Vials of 2 ml (FPL111).

Brillant Green, solution 0'1% no sterile drop to drop 30 ml for Tetrationato Mueller Kaufmann VCC4634
UNE 34-818-85, UNE 34-554-83. EXCLUSIVE USE IN LABORATORY. Add 9.5 ml to 900 ml of base medium presterilized. Keep: 4-8ºC.

Brochothrix STAA Suppl., Sterile powder 4 vials csp 500 ml (for 2 liters of Bochothrix medium). SBH009
You have to add a vial to 500 ml of sterilized medium and cold to 45°Cmore or less. Keep: 4-8ºC.

Bromocresol purple, powder no sterile 1 g (for 67 liters of Azide Dextrose Broth) SMS003
For adding to culture mediums to detect growing with acidification (turn from lilac/purple to yellow/cream)quickly. Add 0'04-0'15 g/l. Keep: 4-21ºC.

Burkholderia cepacia BCPT Supplement, to elaborate 7 l of BPT Selective Agar SMT301
Sterile, 150.000 UI Polimixine B and 100 mg Ticarciline per liter of final medium. Exclusive use in laboratory. Add 14.3 ml/l of colded medium to 45ºC. Contain: 100 ml. Kepp: 4-15ºC IN DARKNESS!!

Cefsulodin (Abbreviation: **Cfs.)**, sterile solution princkable 100 ml (for 20 l of medium MUGPLUS) SMS 400
Selective supplement for coliforms, which is added to medium like MUG PLUS at the rate of 5 ml per liter of final medium. It is advisable add it in cold, after sterilize base medium, because its selectivity infront of positive Gram is absolute. Contain toxics elements. Avoid contact with skin. Keep:4-8º C

CHROMOCYTOGENES Coktail (Selective & Ceftazidin) Supplement, sterile solution princkable 100 ml (for 1 l of medium). Keep: 4-8ºC. SMT700 (Princkable bottle to add 10 ml to each 100 ml of base medium)
Add 50 ml for each 500 ml of base medium sterilized and colded to 45ºC more or less.
This reference SMT 700 include olds SLX010 and SLX072, already hidrated and steriles.
It conatins quantities indicated in ISO 11290-1:1996/Amd.1:2004 (E) of Nalidixic Acid, Ceftazidine, Polimixine B, Cicloheximide and L-∀-phosphatidylinositol, which supplement Ottaviani and Agosti base medium DMT700- (enzimatic digest of animal tissues 18g, enzimatic digest of casein 6 g, yeast extract 10 g, sodium piruvate 2 g, glucose 2 g, magnesium glycerophosphate 1 g, magnesium sulfate anhydrous 0,5 g, sodium chloride 5 g, lithium chloride 10 g, disodium hydrogen phosphate anhydrous 2,5 g, 5-bromo-4-chlorine-3-indolyl-∃-D-glucopyranoside 0,05 g, Agar-agar 13,5 g in 930 ml of bidestiled water).

Cianophyceae Grown Selective Supplement, Liquid supplement no sterile princkable 100 ml (for 20-200 l of medium CIANAGAR) SCL001

Group of oligoelements in sterile watery solution necessary to cianobacteriums to grow quickly and a lot ("Blooms"), with inhibitors agents of other seaweed. You have to add 0,5-5 ml/l of base medium (CIANAGAR) before or after of sterilization (to avoid precipitates, add at the broth after sterilze this one by filtration). Contain toxic elements, avoid contact with your skin. Keep: 4-21ºC.

Cicloheximide (Abbreviation: **Cex),** sterile powder (irradiated) 1 g for 50 l of medium SKM200

Antimicotic to add, sterilized by M.F. to medium where we don´t wish growing of environmental fungus, at the rate of 0.05-0.5 g/l. Contain toxics elemets, avoid contact with skin. Keep: 4-21ºC.

Cicloserine-D, Sterile powder in pre-weighted vial of 0,1 g (boxes for 10 l of medium TSC) SMS252

For TSC (UNE 13401) add 1 pre-weighted vial and sterile for each 250 ml of sterile medium. Exclusive use in laboratory. Caution: toxic. Contain: 40 vials. Keep:freezed

D-Cicloserine (0,1 g) for TSC (UNE 13401)

Sterile. Exclusive use in laboratory. Add content of a vial to 250 ml of base medium TSC smelted and colded to 45-50ºC. Caution:Toxic

Estéril. Uso exclusivo en laboratorio. Añadir el contenido de un vial a 250 ml de medio TSC Base fundido y enfriado a 45-50 ºC. **PRECAUCIÓN: TÓXICO.**

PRESENTATION: 40 VIALES c.s.p. 250 ml of medium

CODE: SMS252- KEEP: 4-8 °C

CIN Yersinia, Sterile supplement in powder, Boxes of 4 Vials (for 2 liters of medium CIN) SBH021

Each vial contain 7,5 mg of Cefsulodine, 2 mg Irgasan and 1,25 mg Novobiocine in a water-soluble excipients. Add 5 ml of sterile bidestiled waterto a vial in an aseptical way. Shake to mix. Add to 500 ml of base medio autoclavaded and cold to 55 ºC. Containtoxic elements, avoid contact with your skin.Keep: 4-8ºC.

Ferric Amonic Citrat + Sodium metabisulphite, Sterile powder 1,5 g (for 20 l of medium) VMT136

For Lactose Sulfite Broth Base (UNE EN 13401) and any medium for anaerobics. Exclusive use in laboratory. Add 1 vial prewieghted and sterile for each half liter of base medium. Keep: 15-25ºC.

Cloranphenicol (Abbreviation: **CAF)**, powder non sterile 25 g (for 50-125 liters of mediums) SMS195

This supplement is perfectly thermoresistant, so you can add it to base mediums before sterilization at autoclave. Dose is changeable according selectivity degree required front bacteriums, from 0,05-0,2 g/l for Sabouraud (SDA) special, till 0,5 g/l for SDA normal or Rosa Bengala Agar. Attack bacterium ADN. Combine with Oxitetraciclina is a complet antibacterium. Toxic, avoid contact with your skin. Also we have it prewieighted in 40 vials os sterile powder 0,5 g (SMT990). Keep: 4-25ºC.

Clorophyceae algae Grown Suppl., Liquid supplement no sterile princkable 100 ml (for 20 l of medium ALGAE) SCN002

Grouop of nutrients NPK and oligoelements in sterile watery solution necessary to cause "Blooms algales" (to grow quickly and in a big mass). You have to add 5 ml per final liter of base medium (Agar Seaweed, Seaweed broth), before or after sterilization (to avoid precipitates, you have to add it to the broth after sterilze this one by filtration).Keep: 4-25ºC.

Clostridium botulinum selective supplement, liophilized for Clostridium Botulinum Agar base SBH008

Add to a vial 2.5 ml of sterile water and 2.5 ml of acetone, in sepsis. Shake. Add to 500 ml of Agar Rotulinum (DMT 038) colding to 50ºC, next to 50 ml of yolk (SBH 010). Mix and share out in plates. Contain 125 mg D-Cycloserine, 2 mg Trimetropin, 38 mg Sulphametoxazol. Sterile. Exclusive use in laboratory. Contain: 10 x 500 ml. Keep: 4-15ºC IN DARKNESS!!

Egg yolk emulsion sterile in princkable vials 50 ml (for 1 l of severals mediums) SBH010

ISO 7932 (*B.cereus*), ISO 6888 (*S. aureus*). Sterile saline solution with 50 ml of fresh egg yolk emulsion to 50%, which is added to each liter of base medium (*Bacillus cereus* Mossel Agar, Baird Parker Medium, TSC Agar, TSN Agar, Sulfite Iron Agar, Clostridium botulinum Agar, SPS Agar...) previously autoclaved and colded to 55ºC. Shake to homogenize both phase(don´t contain additives). White coffe colour is due to irradiation and it doesn´t affect results. Its extraordinary concentration and its white coffe colour (by irradiation) would make of it the egg yolk emulsion which give higher opaque to Bacillus cereus Mossel plates or other mediums, with better vision of halos. Keep: 4-8ºC

Egg yolk emulsion with potasium telurite (Abbreviation: **YolkKTel)** sterile in princkable vials 100ml (for 2 l of medium Baird Parker) SBH011

ISO 6888. Exclusive use in laboratory. Sterile saline solution with 94 ml of fresh egg yolk to 50%, with 6 ml added of sterile solution to 3.5% of potasium telurite.It is added at the range to 50 ml per each liter of base medium (Baird Parker medium) previously autoclaved and colded to 55ºC. Shake to homogenize both phases (it doesn´t contain additives). Add 50 ml/l of Baird Parker colded to 50ºC. White coffe colour is dued to irradiation and it doesn´t affect to results.Its extraordinary concentration and its white coffe colour (by irradiation) would make of it the egg yolk emulsion with telurite which give higher opaque to Baird Parker, with better vision of halos. Keep:4-8ºC.

Egg yolk emulsion with B-Polimyxin sterile in princkable vials 50 ml (for 1 l of Mossel) SAJ001

ISO 7932. c.s.p. 50 tubes/10 bottle/1 liter of Agar B. Cereus Mossel. Exclusive use in laboratory. Sterile saline solution with 50 ml of egg yolk fresh to 50%, with 10 ml of Polimixine B (final concentration 100.000 U.I./ bottle). It has added at the rate to 60 ml per each liter of base medium (Mossel Agar) previously autoclaved and colded to 55ºC. Shake to homogenize. Its extraordinary concentration and its white coffe colour (by irradiation) would make of it the egg yolk emulsion with polimixine which give higher opaque, with better vision of halos. Keep: 4-8ºC.

Fraser- Ferric Amonic Citrate ISO 11290, Sterile in princkable vial 100 ml (for 5 l of medium). SDA112

Exclusive use in Laboratory. For elaboration Fraser Broth to the 50%, add 10 ml of this supplement and 5 ml of the sterile supplement Fraser UVMII (SDA111) to 500 ml of the Fraser Broth Base after cold to 50-45 ºC. For elaboration Fraser Broth, add others 5 ml of supplements of antibiotics (SDA111). Contain citrato ferrico amonico (250 mg solubilized in ethanol). Keep: 4-8ºC. Bottle of 100 ml p/ 5 l of final medium. Keep: 4-21ºC.

Fraser-UVMII ISO 11290, Sterile in princkable vial 100 ml (for 5-10 liters of medium). SDA111

Exclusive use in laboratory. For elaboration Fraser Broth to the 50% add 5 ml of this supplement after cold to 40º-45 ºC. For elaboration Fraser Broth, add 10 ml. Also, add Fraser Citrato Ferrico Amonico Supplement (SDA112). Contain: Nalidixic Acid and Acriflavina. Keep: 4-8ºC. Bottle of 100 ml for 5-10 liters of final medium. Keep: 4-8ºC.

Glycerin liquid no sterile 100 ml (for 10 liters of agar Cetrimide) SDA073

Very used in microbiology, it is used for elaboration of Cetrimide Agar for *Pseudomonas aeruginosa*. It is added to the base medium and bidestiled water, bidestilada, 10 ml/final liter (20 ml/liter YM Broth) and shake it before autoclave. It is not advisable add it to Cetrimide Broth. Keep: 4-25ºC.

Green Bromcresol, Powder no sterile 1 g (for 6,7liters of medium) SMS004

Exclusive use in laboratory. Add 0'15g per liter of medium Homofermentative/Heterofermentative Lactic Acid Bacteria Differential Agar, previously dissolved in 20 ml of NaOH 0'01 N. Keep: 4-25 ºC

Green Malaquite, liquid solution no sterile in drop to drop 100 ml SDA082

Special reactive for stain spore. Keep: 4-8ºC.

Indol Kovacs test, no sterile, in drop to drop SDA056 (5 ml) SBH056 (100 ml)

UNE 34-554-83, UNE 34-818-85. For exclusive use in laboratory. Add to Triptone water, identification test, Colicult MCC, MUG PLUS colonies… Turn red in a few seconds if it is positive. Contain: p-Dimetilaminobenzaldehido (5 g), HCl (25 ml) and Metil-2-butanol-2 (75 ml). Detection of microrganism which produce indol from triptophane is inhibited if there is glucose and actived if there is oxygen in the air. This test difference basiclly *E.coli* (+) from Enterobacter and other enterobacteriums (-).Keep: 4-8ºC.

Iodo-Iodurada with potasium, Solution no sterile drop to drop 30 ml p/Tetrationato Mueller Kaufmann VCC4023

UNE 34-818-85, UNE 34-554-83. EXCLUSIVE USE IN LABORATORY Add 19 ml to 900 ml of pre-sterilized base medium. Keep: 4-8ºC.

Lactic acid, Sterile bottle 100 ml to 10% (for several liters of medium PDA or others one) SAJ003

Add necessary quantity to adjust pH to whised point, better if medium is sterilized, because if pH is very low, agar lose its geliphicants qualities, above all if it is autocalved to low pH. Recommended because CIH split easier Agar-agar macromolecule. Keep: 4-25ºC

Legionella GVPC Selective Enrichment Environmental Supplement sterile princkable in bottle 200 ml SBL604

ISO 11731. For exclusive use in laboratory. Shake and add aseptical 40 ml to 500 ml of medium cold to 50 ºC (or 8 ml to 100 ml of medium). It can contain precipitate for its higher concentration but it disappear when you dilute at the medium base BCYE c.s.p. 2'5 l of medium. Contain Tampon ACES, ∀-Cetoglutarato, KOH, Clorhidrato of L-Cisteina, Pirophosphato ferrico, Vancomicine, Cicloheximide, Polimixine and Glycin.Contain toxic agents, avoid contact with your skin.

Legionella GVPC-Cys Selective Enrichment Environmental Supplement sterile princkable in bottles 200 ml SBL605

Ref. SBL605 is identical to SBL604, but without Cisteine. Keep: 4-8ºC.

M-CP mix Suppl. STERILE, in princkable bottle 100 ml (for 1 liter of medium m-CP) SMT001

Add 50 ml (or an equivalent quantity, for lower alicuotas) for each half liter of medium m-CP Agar sterilizaded and cold to 45°C more or less. The composition and additional order are identical to 5 supplements of the R.D. 1074:2002 and R.D. 140:2003 about running and mineral water). Keep: 4-8ºC.

MUG, powder no sterile 500 mg (for 5-10 liters of medium), KeepFROZEN SKL061+

Added to some selective mediums for coliforms, the fluorogenic compound 4-Metil-Umbeliferil-Beta-D-Glucurónido (MUG) can difference directlly *Escherichia coli*, because cause in presence of the same a blue fluorescence when you observe the reaction with ultraviolet ligh of short wave, no lethal (366 nm). It is added to mediums as Mac Conkey Agar , Sorbitol Mc Conkey Agar, VRBA, BGBL 2%, Lauryl Sulphate Broth... which don´t have interference with the others components, 0,05-0,1 g/l before autoclave.

MUG REVEALING REACTIVE, drop to drop 5 ml no sterile, keep 4-21°C KBH064

Special formula which bring out in a few seconds the fluorescence of E. Coli in mediums with MUG. Contain toxic elements, avoid contact with your skin. Add some drops per tube/bottle and read immediately.

Nalidixic acid, sterile powder 1 g (for 66,7 l of medium CN). Keep: 4-8ºC. SMS034Z

For Pseudomona Base Agar CN. Exclusive use in laboratory. Add 0.015 g/l of final medium. Sometimes we need dissolve before in a mix of water with chlorofom. Keep:4-15-25ºC and protected of light.

NESSLER Reactive, prepared no sterile, BOTTLE drop to drop 100 ml, keep 4-21°C SDA002

prEN 12780. Exclusive use in laboratory. (Composition: HgI_2 (25 g), Potasium (17,5 g) and NaOH (40g) till 1liter of water. Dissolve in water till achieve a volume of 250 ml). Add 1-2 drops to Acetamide Broth.

NITRATE Test, kit 2 droppers 5 ml each one SMN001
Nitrato A + Nitrato B. Exclusive use in Laboratory. Add first the colourless reactive (Nitrato B, *acid sulphanilic*) and after the pink one (Nitrato A, *acid 5-amino-2-naftalensulphonic*). Contain: 2 drop to drop x 5 ml.
Keep: 4-8ºC.

NOVOBIOCIN sterile prepared in princkable vial (for 5 l of medium 0157/Rappaport/ Shigella Broth)
Exclusive use in laboratory. 100 ml contain 100 mg of Novobiocina. c.s.p. 5 l of BCX150
E.ColiO157 Broth or for 5 l of Rappaport Semisolid or for 200 l of Shigella Broth. Add 10 ml to each 500 ml of final medium, or 0.5 ml to each liter of Shigella Broth. Keep: 4-8ºC

Oxford Listeria, Sterile supplement prepared in princkable vial 100 ml (for 5 liter of medium). SBH258
New formula ISO 11290. For 5 liter of final medio . For exclusive use in laboratory. SHAKE TO RESUSPEND. Each bottle contain enough antibiotics to give the follow concentration, when you add 10 ml to 500 ml of Listeria OXFORD Agar Base: Colistina Sulphate: 10 mg/l, Cefotetan:1mg/l, Cicloheximide: 200mg/l. Acriflavine:2,5mg/l, Phosphomicine: 5mg/l. Esterilize 500 ml of Listeria OXFORD Agar Base to the autoclave, cold to 50-55 ºC and add 10 ml (=218,5mg) of this supplement. Mix and share in plates. Caution: Contain acriflavine and cicloheximide. Don´t touch neither inhale, contain toxic agents.Keep:4-8ºC.

Oxitetraciclin, powder no sterile 10 g (for 100 liters of medium OGYE)Keep: 4-21ºC. SBH012
To 100 mg add 5 ml of bidestiled water, shake and sterilize by filtration. It is added to 1 liter of base medium sterilized and cold to 55ºC. Attack the bacterium wall. Combined with cloranphenicol is a complet antibacterium. Contain toxic elements, avoid contact with your skin.

Palcam Listeria, Prepared sterile supplement in princkable vial 100 ml (for 5liters of medium) SBH259
ISO 11290. For 5 liters of final medium. For exclusive use in laboratory. SHAKE TO RESUSPEND. Each bottle contain enough antibiotics to give the follow concentration, when you add 10 ml to 500 ml of Listeria PALCAM Agar Base: Ceftacidine: 10,0 mg, Polimixine B-Sulphate: 5,0 mg, Acriflavine: 10,0 mg. Add 10 ml (= 25 mg) of supplement to 500 mlof medium, sterilized and cold 45-50 ºC. Mix and share in Petri plates. Caution: contain acriflavine. Don´t touch neither inhale, contain toxic agents. Keep: 4-8ºC.

Penase, Keep: 4-8ºC.
Penasa or Penicilinasa is a beta-lactamasa that hidrolize the ring beta-lactamic of the peniciliums, removing its bactericide action. It is used to inactivate the residues of peniciliums that there are at the sample or in the air, and without this inactivation could prevent the growing of the bacteriums. Also it is necessary for the test of sterility of the peniciliums. Its capacity of inactivation of peniciliums is 1.000.000 UI/ml. Only it is gave at the apropiate proportion (1 ml in 100 ml of medium) to the follow culture medium:
Plates and Contact paltes ENVIROCOUNT TSA with Penasa (PPL573)
Plates and Contact plates ENVIROCOUNT TSA-Neutralizing with Penasa (PPL575)
Contact plates ENVIROCOUNT Sabouraud Dextrose Agar with Penasa (PPL574)
To this concentration, it will inactivate till 300 mg of penicilium in the sample. All presentations must keep between 4 and 8 ºC, aalthough Contact plates will become dehidrated more soon than 15ºC.

Peniciline, Keep: 4-8ºC.
The vial contain 10^6 U.I. of G-Sodium penicilium, enough to 10 liters of GSP

Polimixin B Sulphate, sterile solution in princkable vial 100 ml: 1.000.000 U.I. (for 10liters of medium) SMS009
ISO 7932. Add with a needle to base medium (Bacillus cereus Mossel Agar, Vibrio parahaemolyticus Broth...) sterilized with autoclave and cold to 55 ºC, 10 ml of supplement per each liter of base medium cada (in *B.cereus*with egg yolk) to 45 ºC. Contain toxic elements, avoid contact with your skin.Keep: 4-8ºC.

Polisorbate: See Tween 80

Potassium Tellurite (Abbreviation: **KTel)**, sterile solution to 3,5% in princkable vial 100ml SPL016

ISO 6888. For exclusive use in laboratory. This reactive inhibit growing of companion flora of coagulasa positive staphilococcus, of streptococcus faecalis and Vibrio. Organism which reduce telurite a teluro produce dark grey or black colonies.It should add to base medium (Giolitti Cantoni Broth and, if it doesn´t count with yolk+telurite, in Baird Parker Medium and Vogel Johnson Agar) previously sterilized and colded to 55ºC, aseptic and at the rate to 0.3 ml per each tube with 19 ml of Giolitti Cantoni base medium. Contain toxic elements, avoid contact with skin. If it contains white precipitated INSOLUBLE WHEN YOU HEAT A LITTLE BIT, it is because it has damaged. Keep: 4-8ºC.

Preston-Bolton Campylobacter CVTC, Sterile supplement in powder, 10 vials (for 5 l of medium) SLM131

Add 1 vial to 500 ml of medium, final concentration is: Vancomycin 20 mg/l, Trimethoprim 20 mg/l, Cycloheximide 50 mg/l and Cefoperazone 20 mg/l. Add 1 vial per 500 ml of colded medium to 47ºC, remoisturizing it with 5 ml of sterile 50% alcohol. Cointain toxics elements, avoid contact with skin. Ideal to add to Campy Enrichment Broth (DMT024). In this case, it does not require microaerophylic incubation. Keep 4-8ºC.

Rhamnose, powder no sterile 5 g DMT169

Add 5 g of L-Rhamnosa sterilized by filtration to each liter of X/R Listeria Broth already autoclaved and cold.

Methyl Red, solution no sterile 100 ml, Keep: 4-8ºC. SKM494

Indicator of acidification usefull at the test IMViC. To pH 4,5 turn to red and to pH 6,3 turn to yellow. Combined, for example, with the MRVP or Clark & Lubbs medium, allow difference microrganism producers os stable acids from fermantation of sugars (fermentation acid-mixed) Test can not read before of 48 hours of incubation, because then would be a lot of false positives (production of unstable acids).

Skirrow Campylobacter, Sterile supplement in powder, 4 vials (for 4 l of medium) SBH020

Add 1 vial to 1 l of medium, final concentration is: Vancomicine 10 mg/l, Trimethoprim 5 mg/l, Polimixine 2500IU/l. Add 1 vial per liter of colded medium to 47ºC, remoisturizing it with 5 ml of sterile bidestiled water.Cointain toxics elements, avoid contact with skin. Ideal to add to Campy Blood Free agar (DMT184). Keep 4-8ºC.

SODIUM TIOSULPHATE, powder in bottles of 500 g. Keep: 15-25ºC. SMT976

To inactivate the chlorine in water samples. For exclusive use in laboratory. Add 100mg/l sample (UNE 77-063-90) of bath water and 20 mg/l in drink water.

Tomato serum, Sterile liquid supplement 100 ml in princkable vial (for 2liters of medium) SDA500

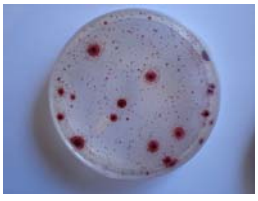
Add to base medium (TJA, MRS…) 50 ml per final liter of medium and autoclave, or add aseptically after. The growing of acidlactic flora is intensive, so colonies are more obvious. Contain equivalent to 12'2 g of tomato dried up. Keep: 4-21ºC.

Telurite-Cefixime, sterile prepared in princkable vial 100 ml (for 5 liters of mediums) BCX161

Add to the Agar Sorbitol Mc Conkey (BCD 161) increase its selectivity and allow the growing of the strain of *E. coli* 0157:H7 that without this supplement is hide for other strains of *E. Coli* companions. Add aseptically 10 ml for each 500 ml of sterilized medium and cold to 45°Cmore or less. Keep: 4-8ºC.

TRIBUTIRIN liquid no sterile in princkable bottle 100 ml (for 10liters of medium) SDA078

Tributirine is a basic fat substrate which is added to the base medium (Tributirin Agar) to detect presence of lipolytic microrganism, as staphilococcus and yeast -Yarrowia lypolytica-). This is important in quality control of some products (butter, cream,…) Add 10 ml per final liter of medium and sterilize with autoclave.Keep: 4-8ºC.



TTC (Triphenil Tetrazolium Sodium Salt), sterile solution 1% in princkable bottle

(for 10-50 l of medium) SDA018. Keep: 4-8ºC.

ISO 7899, UNE 77-076-91. Thermolabil and photolabil chromogenic reactive which is colourless in its oxidate form, but in presence of most of microrganism is reduced to phormazane, irreversible reaction which give a red or pink precipitated in colonies. You have to add it aseptical to base medium (Chapman TTC, KF, Slanetz-Bartley or any medium-PCA, YEA…-where you want reraise contrast among differents colonies with medium and particle) previously sterilized and colded to 55ºC, at the rate to final 1-2 ml/l (in Slanetz-Bartley and KF, addition of 10 ml make of this mediums more selective in front to companion flora.Light and heat cause a false red reaction.

They are TTC-reductors without inhibition (to concentration of 1-2 ml/l) most of bacterium (Streptococcus, Staphylococcus, Listeria, Aeromonas, Citrobacter, *E.coli*, Salmonella, Shigella, Serratia, Yersinia, Bordetella, Campylobacter...) and yeast (Saccharomyces, Cryptococcus, ciertas Candida...), with importants exceptions among positive Gram (some Bacillus, Micrococcus, Lactobacillus), negative Gram (Legionella) and yeast (some Yarrowia, Pichia and Candida).

Tween 80 (Polisorbate 80 USP), liquid no sterile 100 ml (for 20-100 liters of medium LPT) SDA071

This agent decrease the superficial tension of the liquids. This have two important : advantadges:

1- Allow to entrance more quickly of nutrients in microbian cells that are in contact with some mediums included, and one of the most important effects is that you obtain results more quickly than growing.
2- Facilitate fat emulsion, mediums with lipydic reactives can homogenize better.

It is added to base mediums (LPT Neutralizing Agar Purple, LPT Neutralizing Broth Purple, Raka Ray Medium...), before autoclave (although to dissolve you have to heat the water previously to 40 -80 ºC and shake), 1-5 ml per liter of medium to 35 ºC,before to sterilize. Keep: 15-25ºC.

Urea, Sterile liquid solution to the 40% in princkable bottles of 100 ml (for 2liters of medium) SBH019

UNE-EN 12824, UNE 34-818-85, UNE 34-554-83. Hydrolysis of Urea is catalysed by specific enzyme Ureasa, and give carbonate amonicum that alkaline the medium. Proteus is quickly positive, Yersinia enterocolitica and Klebsiella are slow positive , yaest as Cryptococcus are also positive and Salmonella, Shigella and other enterobacteriumsare negatives. Add 50 ml per final liter of medium (Urea Agar, Urea Broth) aseptically and after sterilize the base medium and cold to 55 ºC. Keep: 4-8ºC.

Vaselin sterile liquid in princkable bottles 100 ml SDA081

It is used basiclly to blocked tubes, as paraffin or agar-agar, so create an anaerobic conditions in the medium are bellow. Keep: 4-25ºC.

VOGES PROSKAUER 1 (KOH)+ VP 2 (∀-naftol) kit 2 drop to drop to 5 ml each one SRH083

UNE 34-554-83. For exclusive USE in laboratory. Add the reactive 1 after than 2. Conatin ∀-naftol (6 g/ 100 ml) and KOH (40 g/100 ml). Contain 5 + 5 ml. Keep: 4-8ºC.

Xylose, powder no sterile 500 g DMT171

Add 5 g of Xylosa sterilized by filtration to each liter of X/R Listeria Broth already autoclaved and cold.

¡NEW IRRADIATED SUPPLEMENTS !

SODIUM METABISULFITE (0'75 g)+
FERRIC AMONIUM CITRATE (0'63 g)

Optimization of darkeness of positive microrganism in mediums for Clostridiums.

Sterile. Exclusive use in Laboratory. Add to the content of a vial to (100 ml) – 1 liter of any medium for Clostridiums (SPS, TSN, Lactose Sulfite Broth ...) already sterilized, smelt and cold to 45-50 ºC, to optimize the growing of dareness of positive microrganism.

CODE:VMT136 **PRESENTATION: 40 VIALS c.s.p. 100-1000 ml of medium**

KEEP: 15-21ºC

D-CICLOSERIN (0,1 g) for TSC (UNE 13401)

Sterile. For exclusive use in laboratory. Add the content of a vial to Uso exclusivo en laboratorio. 250 ml of TSC Base medium smelt and cold to 45-50 ºC. **PRECAUTION: TOXIC.**

PRESENTATION: 40 VIALS c.s.p. 250 ml of medium

CODE: SMS252-KEEP: 4-8 °C

MIX OF INACTIVATORS SUPPLEMENTS (no sterile)

Designed by Laboratorios MICROKIT to add to classical Letheen Broth and inactivate the most modern preservative (also Amonium Cuaternario and phenol that are already inactivated by Lecitina andl Polisorbato-Tween-80). Also is very usefull to add to modern LPT Neutralizing Broth when they have a lot of inactivators and then never appear ay generals countings, so we think that our product is sterile and give false negatives.

Exclusive use in laboratory. Add 5.4 g of supplement per liter of Letheen or LPT Neutralizing mediums. Dissolve well. Sterilize.

This mix of supplements inactivate benzenic compounds (included parabenes and phenols), formol, iodine, chlorine and others halogens, bleach, derived mercurials, glutaraldehido...

CODE: SMT002 PRESENTATION: bottles of 100 g

KEEP: 15-21ºCwith bottle closed. VERY HIGROSCOPIC: Keep in environments with low humidity.

COMPOSITION:

Histidine:	1,0 g/l
Sodium Tioglicollate:	1,0 g/l
Sodium Disulphite:	2,4 g/l
Sodium Tiosulphate:	1,0 g/l

See also LPT Neutralizing Broth, our Letheen with new inactivator mix included.

Final user is the only responsible of destruction of grown microrganism according the current environmental legislation. Autoclave before throw to the rubbish.

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