

BURKHOLDERIA CEPACIA-BCPT AGAR (BASE)

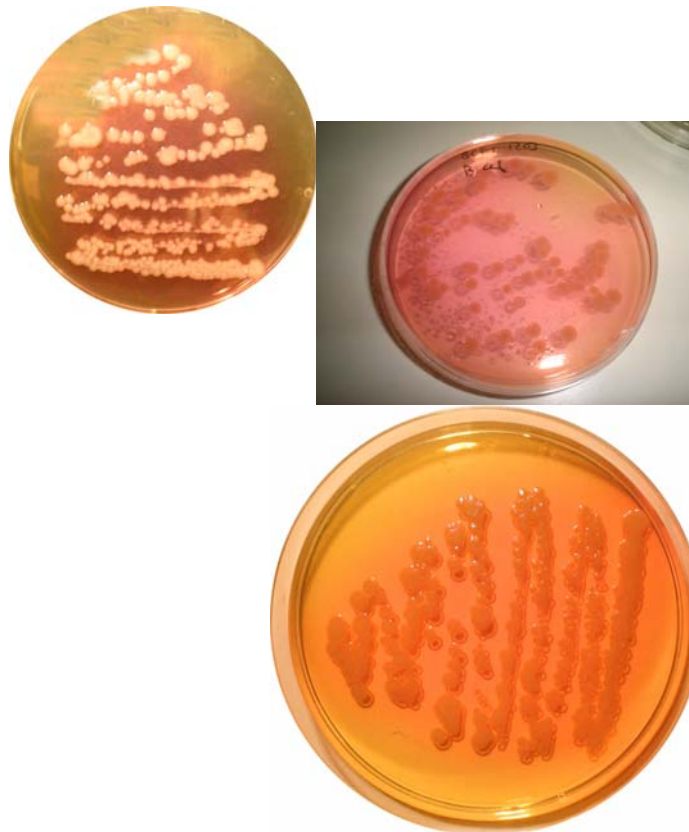
Selective and differential isolation agar for *Burkholderia cepacia* in water, cosmetics and other samples.

COMPOSITION

Polipeptone bacteriological	6.00 g
Sodium piruvate	6.00 g
Potasium Dihidrogen phosphate	4.35 g
Sodium Hidrogen phosphate	1.42 g
Bile salts	1.50 g
Amonium sulphate	1.00 g
Magnesium sulphate	0.20 g
Sulphate ferric amonic	0.01 g
Phenol Red	0.02 g
Violet cristal	0,01 g
Agar-agar	12.0 g
(Formula per liter)	
pH final: adjust to 6.2 ± 0.2	

B. cepacia selective suplement

Polimixine B	150.000 UI/L
Ticarciline	500,0 mg/L
Add when medium is at 45-50°C	



PREPARATION

Dissolve 32.5 g of medium in 1 liter of bidestiled water. Heat to teh boil, shaking since total mixed. Don't overheat up. Autoclave to 121 °C for 15 minutes. Cold to 45-50°C and for best selectivity, add 14 ml of BCPT solution sterile suplement (SMT301) for water analysis (it is not essential for cosmetics samples with a small bioburden). For maximun selectivity and to avoid positive false of *Sphingomonas spp.* and *Moraxella spp.*, add gentamicine, although it form very small colonies and different to tipical *Burkholderia cepacia* .On the other hand pathogenic *Ochrobactrum anthropi* and *Delftia acidovorans* are only distinguish by molecular identification, since comercial test give, same that this medium, positive false of *B.cepacia*.

TO EXCLUSIVE LABORATORY USE ONLY. SHAKE BOTTLE BEFORE USE IT.

KEEP BOTTLE CLOSED IN A DRY, FRESH AND DARK PLACE.

DEHIDRATED CODE: [DMT004](#), SUPPLEMENT BCPT CODE: [SMT301](#)

PRESENTATION: DEHIDRATED MEDIUM 500g (DMT004) and supplement in sterile puncturable bottle 100 ml (SMT301) c.s.p. 7 liter of final medium. Tube 20 ml Agar Base (TPL005) to prepare a plate after melt, cold and add 0.3 ml of supplement SMT301. Bottle Agar Base 100 ml: RPL024 to prepare 5 plates after melt, cold and add 1.5 ml of supplement SMT301. Hermetic PLAQUIS 55 mm complete medium, code PPL920

NOTE: Time ago called *Pseudomonas cepacia*, *Burkholderia cepacia* is a very strong species which group a immense lot of strains of Gram negative bacilli, Oxidase positive (many times oxidase-slow), no fermentant glucose and mobile. Some strains can grow, without fluorescence, in Cetrimide Agar, in TSA or in CN Agar. Many strains don't grow upper than 35°C. In TSA some strains grow with regular colonies, round, white, cream or yellow. It must be identified with specific test to Gram - microorganism (Code 245000). Its general name is for its discoverer and specific name because it was discovered infecting onions (cepaceae). It is a very variable bacterium, and it is able to use more than 200 compounds like nutrients, like antibiotics, disinfectants, pesticides, polyciclical aromatic hydrocarbon (HPA)... furthermore it produces its own antibiotics to supress growing of others competitors, just as special matrix to generate biofilms, that's why it is so difficult to erradicate. It is frequent as saprofitic in waters (specialy in oligotrophic pharmaceutical waters), environmental damp and ground. It is used in contamination biorremediation and agricultural fungical plague control, but as well some microorganism are serious oportunist patogen in nosocomial infections and children. It seems that this bacterium is responsible of pass of life from water to earth, because it can synthesize some macromolecul which act as inductor of rain. *Burkholderia cepacia* has been reported frequently as the protagonist of numerous sanitary withdrawals in cosmetic market in very big multinational manufacturers, so it is very important to control its absence in water, cosmetics and drugs.

QUALITY CONTROL OF MEDIUM

Elaborated in our laboratorie; it is prudent to repeat it in your laboratorie always conditions changes (more than three months without use it, after disinfecting laboratory, after keep to higher temperature, when it takes strange aspect although expire date is correct,...)

DEHIDRATED: powder, pink to orange

PREPARED: sterile, cream-orange, often with black precipitated of iron

GROWING CONTROL 24-48 h to 35°C aprox.

Burkholderia cepacia MKTA 25416, excellent and quickly, with white, yellow or salmon-pink colonies, it turns to pink-fuchsia the medium. With regard to PCA standard, counting 294%

Pseudomonas aeruginosa MKTA 9027, poor, slow and without turning the medium

Pseudomonas fluorescens MKTA 13525, Inhibited or slow and without turning the medium

Bacillus subtilis MKTA 6633, Inhibited

Staphylococcus aureus MKTA 6538, Inhibited

Escherichia coli MKTA 25922, Inhibited

INSTRUCTIONS AND INTERPRETATION

Strike and alicuot of cosmetic dilution enrichment in LPT Broth, (for enumeration in water, spread a membrane which have filtered 100 ml) and incubate to 30-35°C during 24-72 hours. Identify colonies of 1.5-2 mm of diameter, white or salmon-pink with fuchsia halo in the medium. By filtration, enumeration of cfu will be the number of colonies/100 ml filtered..

Final user is the only responsible of elimination of microorganism according current environmental legislation. Autoclave before throw to the rubbish.

Last revision made on November-2012