



Reference : 01-298

Scharlau Microbiology - Technical data sheet

Product :
HC AGAR BASE



Specification

Selective solid medium for the enumeration of yeast and molds in cosmetic products.

Formula * in g/L

Tryptone.....	2,50	Magnesium sulfate.....	0,06
Proteose peptone.....	2,50	Chloramphenicol.....	0,10
Yeast extract.....	5,00	Sodium carbonate.....	1,00
D(+) Glucose.....	20,00	Agar.....	15,00
Disodium phosphate.....	3,50		
Monopotassium phosphate.....	3,40	Final pH 7,0 ±0,2 at 25 °C	
Ammonium chloride.....	1,40		

* Adjusted and /or supplemented as required to meet performance criteria

Directions

Suspend 54,5 g in 1 L of distilled water and bring to the boil. Add 20 ml of Polysorbate 80 (Ref. 06-088) and homogenize. Distribute in suitable containers and sterilize by autoclaving at 121°C for 15 minutes.

Description

The HC Agar was developed by Mead & O'Neill in 1986 to attain reliable enumeration of moulds in cosmetic products in short time. The nutrient basis of the medium is the dextrose with the peptones and yeast extract that supplies the energy, nitrogen and vitamins and growth factors. The inorganic ions are given by ammonium chloride and magnesium sulphate and both phosphates acts buffering the medium. Sodium carbonate and polysorbate are detoxifiers and neutralising preservatives and others toxic substances. The selectivity against bacteria is due to the chloramphenicol.

Technique

Suitable sample is inoculated into surface of medium plates per duplicate and incubate aerobically at 30±1°C for 72 hours. Count colonies of moulds from duplicate plates and record average count of mould count per g or mL of sample.

Quality control

Incubation temperature: 30 °C ± 1

Incubation time: ≥ 72h

Inoculum: Practical range 100 ± 20 CFU. Min. 50 CFU (Productivity) / 10⁴-10⁶ CFU (Selectivity) according to ISO 11133:2014/Amd 1:2018 .

Microorganism	Growth	Remarks
<i>Bacillus subtilis</i> ATCC® 6633	Inhibited	-
<i>Aspergillus niger</i> ATCC® 16404	Productivity > 0.50	-
<i>Candida albicans</i> ATCC® 10231	Productivity > 0.50	-
<i>Pseudomonas aeruginosa</i> ATCC® 27853	Partial Inhibited	-
<i>Staphylococcus aureus</i> ATCC® 25923	Inhibited	-

References

- .MEAD, C. & J. O'NEILL (1986) A three-day mould assay for cosmetics and toiletries. J. Soc. Cosmet. Chem. 37:49-57.
- . ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).