

Schaedler Agar

Use and description:

Schaedler Agar gives excellent recovery of anaerobic and microaerophilic organisms from human fecal and gastrointestinal specimens as well as aerobic microorganisms. The addition of vitamin K1 favors growth of Gram-positive sporulated species. The medium can be supplemented with colistin, nalidixic acid, kanamycin, vancomycin to increase selectivity. It contains Cystein HCl and Glucose as reducing agent instead of thioglycollate. Cystein HCl inhibits E.coli.

Composition per liter:

Yeast extract.....	5.00 g
Agar.....	15.00 g
Peptones.....	11.00 g
Glucose.....	5.80 g
Sodium chloride.....	1.70 g
Dipotassium hydrogen phosphate.....	0.80 g
Tris buffer.....	3.00 g
Cysteine HCl.....	0.40 g
Haemine.....	0.01 g
Vitamin K.....	0.01 g

Final pH of the ready to use medium: 7.6 ± 0.2

Medium preparation:

Add 42.7 grams of dehydrated culture medium to 1 liter of distilled water. Heat with repeated stirring and boil for one minute to dissolve completely. Distribute and autoclave for 15 min at 121°C. Mix well before pouring. It can be supplemented for the enumeration of clostridia.

Quality specifications:

Dehydrated medium: homogeneous, light beige fine powder.

Ready to use medium: clear to trace hazy and light amber in color.

Microbiological response:

Organism	Result
<i>Clostridium perfringens</i> ATCC 13124	Growth
<i>Bacteroides fragilis</i> ATCC 25285	Growth
<i>Streptococcus pyogenes</i> ATCC 19615	Growth

Storage:

Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or the color has changed from the original.