Condalab

Reference: 0964 **Technical Data Sheet**

Product: TSC AGAR + EGG YOLK

Specification

Medium recommended for isolation, cultivation and enumeration of *Clostridium perfringens* according to Iso standars.

Presentation

	Packaging Details	Shelf Life	Storage
20 Prepared Plates 90 mm Plates with: 21 ± 2 ml	1 box with 2 packs of 10 plates/pack. Single cellophane.	3 months	2-14°C

Composition

Composition (g/l):

Tryptone	15.0
Soy Peptone	5.0
Yeast Extract	5.0
Sodium meta-bisulfite	1.0
Ferric ammonium citrate	1.0
Cycloserine	0.4
Egg yolk emulsion	50.0 ml
Agar	18.0

Description /Technique

Description:

The medium is a modification of the classical TSN Agar in which the traditional antibiotics, polymyxin and neomycin have been replaced by cycloserine. Cycloserine has been found more selective for *Clostridium perfringens*, and reduces the production of diffuse blackening. *Clostridium perfringens* is more resistant to cycloserine than to sulfadiazine, polymyxin and neomycin, hence reducing the dosage. The presence of sodium meta-bisulfite and ferric ammonium citrate allow three differential characteristics of this anaerobic species to be verified with just one assay. These characteristics are sulfite reduction, growth at 44±1°C and cycloserine resistance.

Technique:

Collect, dilute and prepare samples and volumes to be filtered as required according to specifications, directives, official standard regulations and/or expected results.
Inoculate the sample and cover it with a second layer of room temperature melted agar.
Incubate the plates anaerobically at 44±1°C for 21±3h.
(Incubation times greater than those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications,...)
After incubation, enumerate the colonies with a black iron sulfida precipitate.(H2S+)
Confirmation of characteristic colonies as C.*perfringens* is required, throughout further microbiological or biochemical tests.

Quality control

Physical/Chemical control

Color : yellow pH: 7.6 ± 0.2 at 25°C

Microbiological control

Inoculate: Practical range 100 ± 20 CFU; Min. 50 CFU (Productivity)/ 10^4-10^6 (Selectivity).
Microbiological control according to ISO 11133:2014/ Adm 1:2018.

Anaerobiosis. Incubation at 44 ± 1 °C during 21 ± 3h.

Microorganism	Growth
Clostridium perfringens ATCC® 13124, WDCM 00007, NCTC® 8237	Good (≥ 50 %)
Bacillus subtilis ATCC® 6633, WDCM 00003	Inhibited

Sterility Control

Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH
Check at 7 days after incubation in same conditions

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