TITAN MEDIA

DEXTROSE TRYPTONE AGAR TM 092

For detection and enumeration of mesophilic and thermophilic aerobic organisms in foods

Composition

Ingredients	Gms/Ltr.
Agar	15.00
Casein enzymatic hydrolysate	10.00
Dextrose	5.00
Bromo cresol purple	0.04

* Dehydrated powder, hygroscopic in nature, store, in a dry place in tightly- sealed containers below 25°C and protect from direct Sunlight.

Instructions for use

Dissolve 30.04gms in 1000ml distilled water. Gently heat to boiling with gentle swirling and dissolve the medium is completely. Sterilize by autoclaving at 15psi (121^0C) for 15 minutes. Cool to 40 - 45°C and pour into sterile Petri plates.

Appearance: Purple colour, clear to slightly opalescent gel
pH (at 25°C): 6.7 ± 0.2

Principle

DEXTROSE TRYPTONE AGAR is used for detection and enumeration of mesophilic and thermophilic spore bearers in foods. The medium was designed to detect the thermophilic bacteria which cause 'flat sour' spoilage of canned foods. The medium also detects the 'flat sour' organism *Bacillus stearothermophilus* in sugar and other sweetening agents used in the preparation of frozen dairy foods, cereals and other food products. Medium consists of Casein enzymatic hydrolysate carbon, nitrogen, and vitamin sources used for general growth requirements in Dextrose Tryptone Agar. Dextrose is the carbohydrate source. Bromo cresol purple is the pH indicator. Agar is the solidifying agent.

Interpretation

Cultural characteristics observed after inoculating (10^3-10^5CFU/ml), on incubating at 54 - 56^0C for 36 - 48 hours.

Microorganisms	ATCC	Inoculum (CFU/ml)	Appearance of colony
Bacillus coagulans	7050	10^3-10^5	Good, yellow colour colony
Bacillus stearothermophilus	7953	10^3-10^5	Good, yellow colour colony

References

1. Williams, O. B. Food Res. 1:217-221. (1936).
2. National Canners Association. Bacterial standards for sugar. (1933).