Peptonized SM Powder

RM275

The product can be used on its own or in conjunction with other ingredients in media for isolation of lactobacilli and bacteriological examination of dairy products.

Principle And Interpretation

Peptonized SM Powder is an enzymic digest of high grade skimmed milk powder. It has high tryptophan content and is therefore used in media for testing the indole reaction. It serves as a source of nitrogen and also has high level of carbohydrate. Suitable for cultivation of Lactobacilli, yeasts and moulds.

Quality Control

Appearance

Light yellow to brownish yellow homogenous free flowing powder,having characteristic odour but not putrescent.

Solubility

Freely soluble in distilled/purified water. Insoluble in alcohol and ether.

Clarity

1% w/v aqueous solution is clear without any haziness after autoclaving at 15 lbs pressure (121ºC) for 15 minutes.

Reaction

Reaction of 2% w/v aqueous solution at 25ºC.

pH

6.10- 7.10

Microbial Load:

Total aerobic microbial count (cfu/gm)

By plate method when incubated at 30-35°C for not less than 3 days.

Bacterial Count : <= 2000 CFU/gram

Total Yeast and mould count (cfu/gm)

By plate method when incubated at 20-25°C for not less than 5 days.

Yeast & mould Count : <= 100 CFU/gram

Test for Pathogens

1. *Escherichia coli*-Negative in 10 gms of sample 2. *Salmonella* species-Negative in 10 gms of sample 3. *Pseudomonas aeruginosa*-Negative in 10 gms of sample 4. *Staphylococcus aureus*- Negative in 10 gms of sample 5. *Candida albicans*- Negative in 10 gms of sample 6. *Clostridia*- Negative in 10 gms of sample

Indole Test

Tryptophan content:Passes

Cultural response

Cultural response is observed after an incubation at 35-37°C for 18-48 hours by preparing Universal Beer Agar (M415) using Peptonized SM Powder as an ingredient.

Cultural Response

Organism	**Growth**
Cultural Response	
Acinetobacter calcoaceticus ATCC 23055	Good-luxuriant
Lactobacillus acidophilus ATCC 4356	Good-luxuriant
Lactobacillus fermentum ATCC 9338	Good-luxuriant
Proteus vulgaris ATCC 13315	Fair-good

Chemical Analysis

Total Nitrogen	>= 6.0%
AminoNitrogen	>= 1.50%
Sodium chloride	<= 5.0%
Loss on drying	<= 5.0%
Residue on ignition	<=12.0%

Storage and Shelf Life

Store below 30°C. Use before expiry date on the label.