

Dehydrated Culture Media Bases / Media Supplements

# **Technical Information**

**Clausen MiVeg Medium** 

## Product Code : VM1552

Application:- Clausen MiVeg Medium is used for sterility testing.

Composition		
Ingredients	Gms / Litre	
MiVeg hydrolysate	15.0	
Papaic digest of soyabean meal	3.0	
Yeast extract	6.0	
Dextrose	6.0	
Sodium chloride	2.5	
Dipotassium phosphate	2.0	
Sodium citrate	1.0	
L-Cystine	0.5	
L-Asparagine	1.25	
Sodium dithionate	0.4	
Sodium thioglycollate	0.5	
Lecithin	0.3	
Magnesium sulphate	0.4	
Calcium chloride	0.004	
Cobalt sulphate	0.001	
Cupric sulphate	0.001	
Ferrous sulphate	0.001	
Zinc sulphate	0.001	
Manganese chloride	0.002	
Resazurin	0.001	
Agar 0.002	0.75	
Final pH ( at 25°C)	7.1±0.2	

\*\* Formula adjusted, standardized to suit performance parameters.

### Principle & Interpretation

Clausen MiVeg Medium is prepared by using MiVeg hydrolysate instead of Casein enzymic hydrolysate thereby making the medium free from BSE/TSE risks. This medium is the modification of Clausen medium which was developed by Clausen (1) and this medium is also called as HS-T (Dithionite thioglycollate) broth and is recommended for sterility testing. Standard microbial contamination test is developed to establish the number of non-sterile units if any in a batch is below the specific level. Random sampling in sufficient quantity of the bulk should be examined. Two methods can be used viz. Membrane filter method and Dilution method in microbial contamination test for detecting the non-sterile units.

This medium is like the conventional is a very nutritious medium as it contains of MiVeg hydrolysate, Papaic digest of soyabean meal, yeast extract and dextrose. L-Cystine and thioglycollate serve as reducing agents, and the essential metals help for isolating anaerobic sporeformers. Polysorbate 80 and lecithin are incorporated in this medium to overcome the effects of cationic agents, which can exert bacteriostatic effect in vitro. This medium is clear in appearance and yellow coloured, but under aerobic condition it turns pink. Therefore at the time of use the upper third of the medium should be pink.





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# Methodology

Suspend 40 grams of powder media in 1000 ml distilled water containing 3 grams polysorbate 80 and 5 grams glycerol. Mix thoroughly. Heat to boiling to dissolve the medium completely. Dispense as desired and sterlize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Place in cool dark place till use.

NOTE: DO NOT RESTERILIZE the medium.

# **Quality Control**

#### Physical Appearance

Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

Colour and Clarity of prepared medium

Light straw coloured, clear to slightly opalescent solution with upper 10% or less medium pink on standing. Reaction

Reaction of 4.0% w/v aqueous solution containing 0.3% w/v polysorbate 80 and 0.5% w/v glycerol is pH 7.1  $\pm$  0.2 at 25°C.

pH range

6.9-7.3

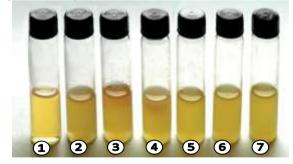
#### Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours

<b>Organisms (ATCC)</b> Bacillus subtilis (6633)	Inoculum (CFU) 10 <sup>2</sup> -10 <sup>3</sup>	<b>Growth</b> luxuriant
Candida albicans (10231)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant
Clostridium sporogenes (11437)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant
Pseudomonas aeruginosa (27853)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant
Staphylococcus aureus (25923)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant
Staphylococcus epidermidis (12228)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant
Streptococcus pyogenes (19615)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant

# Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label. Prepared Media: 2-8° in sealable plastic bags for 2-5 days.



#### VM1552 Clausen MiVeg Medium

- 1. Control
- 5. Staphylococcus aureus
- 2. Bacillus subtilis
- 6. Staphylococcus epidermidis 7. Streptococcus pyogenes
- 3. Candida albicans 4. Pseudomonas aeruginosa

CDH



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### **Further Reading**

1. Clausen O.G., 1973, Pharmaceutica Acta Helvetiae, 48:541.

#### **Disclaimer**:

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate
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