

**Clausen HiVeg™ Medium**

**MV552**

Clausen HiVeg Medium is recommended for sterility testing.

**Composition \*\* :**

Ingredients	Grams/Litre
HiVeg 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	0.75

Final pH (at 25°C ) 7.1 ± 0.2

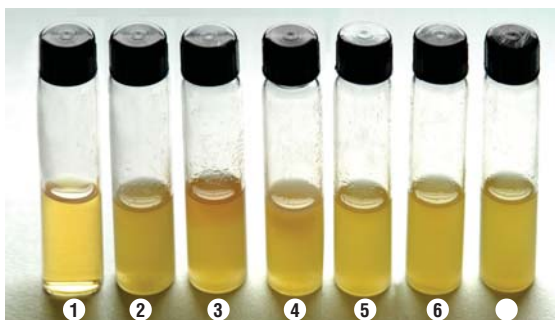
\*\* Formula adjusted, standardized to suit performance parameters.

**Directions :**

Suspend 40 grams in 1000 ml distilled water containing 3 grams polysorbate 80 and 5 grams glycerol. Heat to boiling to dissolve the medium completely. Dispense as desired and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Place in cool dark place till use. DO NOT RESTERILIZE the medium.

**Principle and Interpretation :**

Clausen HiVeg Medium is prepared by using HiVeg hydrolysate instead of Casein enzymic hydrolysate which is free of BSE/TSE risks. Clausen HiVeg 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



**MV552 Clausen HiVeg Medium**

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

**Product Profile :**

Vegetable based (Code MV)Ⓞ	Animal based (Code M)
<b>MV552</b> HiVeg hydrolysate	<b>M552</b> Casein enzymic hydrolysate

<b>Recommended for</b>	: Sterility testing.
<b>Reconstitution</b>	: 40.0 g/l
<b>Quantity on preparation (500g):</b>	: 12.5 L
<b>pH (25°C)</b>	: 7.1 ± 0.2
<b>Supplement</b>	: Polysorbate 80 & Glycerol
<b>Sterilization</b>	: 121°C / 15 minutes.
<b>Storage</b>	: Dry Medium - Below 30°C, Prepared Medium - Store at cool place (not at 4°C) and in the dark for not longer than a month.

is below the specific level. Random sampling in sufficient quantity of the bulk should be examined.

In microbial contamination test for detecting the non-sterile units, two methods can be used viz. Membrane filter method and Dilution method.

Clausen HiVeg Medium like the conventional is a very nutritious medium consisting of HiVeg hydrolysate, Papaic digest of soyabean meal, yeast extract and dextrose. L-Cystine and thioglycollate act as reducing agents, and the essential metals help for isolating anaerobic sporeformers. Polysorbate 80 and lecithin are added 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.

**Quality Control :**

**Appearance of powder**

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

**Colour and Clarity**

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 ± 0.2 at 25°C.

**Cultural Response**

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

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

**References :**

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