

## **Product Data Sheet**

### **CAMPYLO THIOGLYCOLLATE MEDIUM BASE (CAMPY-THIO MEDIUM)**

**Product No.** GB-DCM-00152-1A

#### **INTENDED USE**

For isolation, maintenance and transport of Campylobacter species.

#### **Product Description**

Campylobacter infections occur sporadically in the summer months and usually follow ingestion of improperly handled or cooked food, primarily poultry products. Dekeyser et al reported that Campylobacter jejuni could be isolated on a selective media supplemented with antimicrobials from the faeces of patients having diarrhea and gastroenteritis (by the filtration technique). The antimicrobials help to inhibit the normal enteric flora of faeces. Skirrow used a selective medium with three antimicrobials i. e. vancomycin, polymyxin B and trimethoprim. Later on, Blaser et al isolated C.jejuni by direct inoculation of faeces sample on an agar medium containing four antibiotics. They also reported that Jejunii could be isolated from faeces sample held at refrigeration temperature for duration of 8-10 hours in Thioglycollate Broth, incorporated with the four antibiotics. Blaser et al later included the fifth antibiotic Cephalothin to inhibit nonpathogenic Campylobacter fetus. Campylor Thioglycollate Medium Base (with antibiotics) is generally used as a holding medium when immediate examination and testing of samples is not possible. Campylor Thioglycollate Medium Base is also recommended by APHA for maintenance, transport and storage of cultures of Campylobacter species. It is also used for enrichment of Campylobacter species from stool samples. The medium contains necessary nutrients to promote growth of Campylobacter species. Moreover the supplement (Blaser-Wang) consists of five antibiotics viz. amphotericin B, Cephalothin, polymyxin B, trimethoprim and vancomycin which inhibits multiplication of normal microbial flora in faecal specimens thus facilitating isolation of C.jejuni. Cephalothin may not always inhibit C.fetusspecies and some strains may grow at 42°C. Further tests should be performed to confirm C. jejuni. Rectal swabs can be directly inoculated into the medium in tubes. About 5 drops of stool sample (prepare a saline suspension if stool is solid) can be placed on the medium about 1cm below the surface. Inoculated Campylor Thioglycollate Medium Base can be refrigerated and subcultured on Campylobacter Agar Base with Campylobacter Supplement-I.

#### **STRUCTION FOR USE**

- Dissolve 26.8 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- To make the medium selective for Campylobacter species, add reconstituted contents of 2 vials of Campylobacter supplement-I.
- Mix well and dispense into sterile tubes or flasks as desired.

### Product Specifications

Ingredients	Gms / Ltr
Tryptone	20.000
Sodium chloride	2.500
Dipotassium hydrogen phosphate	1.500
Sodium thioglycollate	0.600
L-Cystine	0.400
Sodium sulphite	0.200
Agar	20.000

### PRINCIPLE

Tryptone provides nitrogenous, carbonaceous nutrients along with vitamins. Phosphates are added to buffer the medium. Sodium chloride maintains the osmotic equilibrium. L-cystine provides amino acids to the media and agar acts as a solidifying agent.

Microorganism	ATCC	Inoculum (CFU)	Growth	Incubation Temperature	Incubation Period
Campylobacter coli	33559	50-100	Good-luxuriant	42°C	18-24 Hours
Campylobacter jejuni	33291	50-100	Good-luxuriant	42°C	18-24 Hours
Escherichia coli	25922	50-100	None-poor	42°C	18-24 Hours
Helicobacter pylori	43504	50-100	Good-luxuriant	42°C	18-24 Hours



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## **STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

## **QUALITY CONTROL SPECIFICATIONS**

Appearance of Powder: Cream to yellow homogeneous free flowing powder

Appearance of prepared medium Whitish coloured, turbid gel forms in Petri plates.

PH (at 25°C): 7.0±0.2

## **DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

**This product is for research use only.**