

TM 809 – TRYPTOSE CYCLOSERINE AZIDE AGAR BASE

INTENDED USE

For enumeration of sulphite reducing anaerobes essentially Clostridia.

PRODUCT SUMMARY AND EXPLANATION

Tryptose Cycloserine Azide Agar Base was originally formulated by Hauschild and Hilsheimer. This medium was later modified by decreasing the concentration of D-cycloserine, sulphite and iron and by the addition of sodium azide. This medium utilizes the selective inhibitory properties of D-cycloserine and an indicator system involving sulphite and iron. Growth of non-mesophilic organisms are suppressed while *C. perfringens* and related species will reduce the sulphite and form black colonies due to the production of ferrous sulphide.

COMPOSITION

Ingredients	Gms / Ltr
Tryptose	15.000
Papaic digest of soyabean meal	5.000
Meat extract	5.000
Yeast extract	5.000
Glucose	2.000
Disodium disulphite	0.500
Ferric ammonium citrate	0.500
Sodium azide	0.050
Agar	14.000

PRINCIPLE

Tryptose, papaic digest of soyabean meal, meat extract and yeast extract provide essential nitrogenous compounds and vitamins needed for the growth of anaerobes. Glucose serves as carbon source. Disodium disulphite is reduced to hydrogen sulphide which combines with ferric ions of ferric salts to produce the insoluble black precipitate of ferrous sulphide. D-Cycloserine and sodium azide inhibit a number of organisms including *Bacillus* species, enteric bacilli, *Proteus*, *Pseudomonas* and most of the cocci. Some anaerobes reduce sulphite to hydrogen sulphide (H₂S) which is indicated by blackening of the colonies due to presence of ferric ammonium citrate.

INSTRUCTION FOR USE

- Suspend 47.05 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 50°C and aseptically add 3 ml rehydrated contents of 1 vial of T.S.C. Supplement for 1000 ml medium.
- Mix well and pour into sterile Petri plates.
- Warning: Sodium azide has a tendency to form explosive metal azides with plumbing materials. It is advisable to use enough water to flush off the disposables.

QUALITY CONTROL SPECIFICATIONS



Appearance of Powder : Cream to brownish yellow homogeneous free flowing powder.
Appearance of prepared medium : Yellow to amber coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.4±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Clostridium perfringens</i>	12924	50-100	Good	40-50%	35-37°C	18-24 Hours
<i>Clostridium sporogenes</i>	11437	50-100	Good	40-50%	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	>=10 ³	Inhibited	0%	35-37°C	18-24 Hours
<i>Staphylococcus aureus</i>	25923	>=10 ³	Inhibited	0%	35-37°C	18-24 Hours

PACKAGING:

In pack size of 500 gm bottles.

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.







DISPOSAL

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

REFERENCES

1. Corry J. E. L., Curtis G. D. W. and Baird R. M., 1995, Culture Media for Food Microbiology, Vol. 34, ELSEVIER, Amsterdam.
2. Hauschild A. H. W. and Hilsheimer R., 1974, Appl. Microbiol., 27, 521-527.
3. Eisgruber H., 1986, Vet Med. Diss. FU Berlin.
4. Eisgruber H. and Reuter G., 1991, Arch. Lebensmittelhyg, 42,125-129.



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Buckstrasse 10 48163 Muenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
Revision: 08 Nov., 2019