

**TRYPTOSE (BIOTONE) AGAR
TRYPTOSE (BIOTONE) BROTH**

Powdered and ready to use general purposes media

TRYPTOSE AGAR - TYPICAL FORMULA (G/L)

Tryptose	20.000
Glucose	1.000
Sodium Chloride	5.000
Thiamine HCl	0.005
Agar	15.000

TRYPTOSE BROTH - TYPICAL FORMULA (G/L)

Tryptose	20.000
Glucose	1.000
Sodium Chloride	5.000
Thiamine HCl	0.005

DIRECTIONS

Suspend 41g of Tryptose Agar or 26g of Tryptose Broth in 1000ml of cold distilled water. Heat to boiling with frequent agitation and sterilise by autoclaving at 121 °C for 15 minutes.

Final pH 7.2 ± 0.2

DESCRIPTION

Tryptose Agar and Tryptose Broth are prepared according to the APHA formulations for the cultivation of *Brucella* spp. (Tryptose Vitamin B Media), and they correspond to media indicated by the WHO as Tryptose Media.

Tryptose Agar can be used as it is, or as a base for the preparation of enriched, selective and diagnostic media.

The World Health Organisation recommends the preparation of the following media:

1 - Serum glucosate medium, for *Brucella* cultures and phagic lysis tests: to each 95ml of Tryptose Agar add 5ml of serum-glucosate solution, sterilised and cooled to 50°C. Mix thoroughly, pour into sterile Petri dishes and incubate before use to confirm sterility. Serum-glucosate solution: dissolve 10g of glucose in 50ml of bovine or equine serum free from anti-brucella antibodies and inactivated by heating for 30 minutes at 56°C and sterilised by filtration.

2 - Tween glucosate medium can substitute serum glucosate in the absence of serum. Dissolve Tryptose Agar in one litre of water containing 5ml of Tween 40, distribute and autoclave: cool to 50 °C and aseptically add the glucosate solution sterilised by filtration (20% solution: 5ml to 95ml of medium); mix thoroughly and pour into sterile dishes; incubate before use to check sterility.

3 - Glycerine glucosate medium (for dissociation studies): dissolve Tryptose Agar in one litre of water containing 20ml of glycerine; proceed as with Tween glucosate medium.

4 - Selective medium (for isolation from samples containing mixed flora). To Tryptose Agar (or glucosate media indicated in points 1,2 and 3 above) autoclaved and cooled to 50°C, add 100mcg/ml cycloheximide, 26 units/ml bacitracin, 6 U.I./ml polymyxin B; the further addition of crystal violet (1.25 mcg/ml) is only recommended in special cases because the stain is toxic for some *Brucella* species. Mix thoroughly and distribute into sterile plates.

5 - Diagnostic media (to study sensitivity to basic thionin and fuchsin): prepare two 0.1% aqueous solutions of basic thionin and fuchsin, store in dark glass bottles with screw-caps and renew every three months; add stains to Tryptose Agar (or to serum glucosate medium), sterilised and cooled to 50°C in the following proportions:

Thionin 1:25,000 (40 mcg/ml), 1:50,000 (20 mcg/ml), 1:100,000 (10 mcg/ml).

Basic fuchsin 1:50,000, 1:100,000.

Mix thoroughly and distribute into sterile Petri dishes.

Tryptose Broth is recommended for blood, cerebrospinal fluid, exudate and bone cultures and specimens.

Tryptose Broth can also be used in association with Tryptose Agar in the biphasic Castaneda culture technique.

USER QUALITY ASSURANCE (37°C-24 hrs)

Productivity control

S. aureus ATCC 25923: growth*E. coli* ATCC 25922: growth**STORAGE**

Dehydrated medium: 10-30°C

User prepared tubes or flasks: 3 months at 2-8°C

REFERENCES

- APHA (1963), Diagnostic Procedures and Reagents. Fourth edition
- OMS (1968); La Brucellose: Techniques de Laboratoires. Serie de Monographies, N. 55.

PACKAGING

4011452	Tryptose Agar	500g (12.2 l)
551145	Tryptose Agar	20 ready to use slanted tubes
4011462	Tryptose Broth	500g (19.2 l)
4011464	Tryptose Broth	5 kg (192 l)
551146	Tryptose Broth	20 x 9 ml ready to use tubes

