

# Dental Mutans Broth



Medium used for the detection and cultivation of *Streptococcus mutans* in saliva and plaque.

## • CONTENTS (Liter)

Tryptose	10.0 g
Peptone	10.0 g
Glucose	1.0 g
Saccharose	300.0 g
Dipotassium Phosphate	5.0 g
Trypan Blue	0.012 g
Final pH = 7.6 ± 0.2 at 25°C.	

## • PROCEDURE

Suspend 326.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Aseptically add 1 mL of Potassium Tellurite 1% supplement (MB-P1842). Mix well. Dispense in tubes.

### Potassium Tellurite 1% supplement

1 vial contents (each vial is sufficient for 500 mL of medium)

Potassium Tellurite	0.1 g
---------------------	-------

## • INTERPRETATION

Dental Mutans Broth is a medium used for the detection and cultivation of *Streptococcus mutans* in saliva and plaque. Peptones provide nitrogen, carbon, amino acids and minerals. Glucose and saccharose are the carbohydrate source. Dipotassium phosphate is the buffering agent. Trypan blue is absorbed by colonies, producing a blue color.

## • TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at 35 ± 2°C for 24 - 48 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

### Prepared medium

Appearance: clear to slightly opalescent.

Color: tan-amber.

Incubation conditions: 35 ± 2°C / 24 – 48 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Streptococcus mutans</i>	25175	50-100	good	dark-blue to black colony

**• STORE**

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

**• REFERENCES**

1. Coykendall AL. Proposal to elevate the subspecies of *Streptococcus mutans* to species status, based on their molecular composition. *Int. J. Syst. Bacteriol.* 27: 26-30, 1977.
2. Skerman VB, et al. Approved lists of bacterial names. *Int J Syst Bacteriol* 30: 225-420, 1980.

**• PACKAGE**

Cat. No : MB-D1085 Dental Mutans Broth	500 G
---	-------