

## Product Information

### S5181 Sulphate API Broth (Sulphate American Petroleum Institute Broth)

Sulfate API broth is used for the detection and estimation of sulfate reducing bacteria as described by the American Petroleum Institute Recommended Practice (1).

#### Composition:

Ingredients	Grams/Litre
Yeast Extract	1.0
Ascorbic Acid	0.1
Magnesium Sulfate	0.2
Dipotassium Phosphate	0.01
Ferrous Ammonium Sulfate	0.1
Sodium Chloride	10.0
Final pH 7.5 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25°C.

Appearance: Yellow colored, homogeneous, free flowing powder.

Color and Clarity: Light yellow colored, clear to slightly solution forms in tubes.

#### Directions:

Suspend 11.4 g of Sulfate API Broth in 1000 ml of distilled water containing 0.4% (v/v) sodium lactate (Fluka 71718). Heat to dissolve the medium completely. Dispense 9 ml of medium into each screw-capped tube. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 10 minutes. Close the caps immediately while the medium is still hot.

#### Principle and Interpretation:

Sulfate-reducing bacteria causes corrosion of oil well systems. Sulfate-reducing bacteria convert sulfate to sulfide which with the ferrous ion results in a black color.

Cultural characteristics after 1 week at 30°C, anaerobically.

Organisms (ATCC)	Growth
<i>Desulfovibrio desulfuricans</i> (29577)	+++

#### References:

1. American Petroleum Institute Recommended Practice, (1959). First Edition, 28.
2. American Type Culture Collection, Manassas, Va., U.S.A.