

## SULFATE REDUCERS BROTH

Liquid medium for detection and enumeration of sulfate reducing bacteria from environmental samples.

TYPICAL FORMULA	(g/l)
Enzymatic Digest of Casein	9.5
Sodium Sulfite Anhydrous	0.5
Magnesium Sulfate Anhydrous	1.9
Ferric Citrate	0.5
Sodium Chloride	9.5
Sodium Lactate	3.5
Final pH 7.4 ± 0.2	

### DESCRIPTION

SULFATE REDUCERS BROTH is a liquid medium used for the detection and enumeration of sulfate reducing bacteria (SRB) from environmental samples.

### PRINCIPLE

Enzymatic digest of casein provides carbon, nitrogen, vitamins and minerals to support bacterial growth. Magnesium sulfate is a ready accessible source of sulfate for SRB. SRB reduce sulfate to form hydrogen sulfide. Ferric citrate reacts with hydrogen sulfide to produce ferrous sulfide, an insoluble black precipitate. Sodium chloride maintains the osmotic balance of the medium. Sodium lactate enhances bacterial growth.

### TECHNIQUE

The broth is suitable for enumeration of SRB by an MPN technique. Inoculate tubes preparing serial dilutions of the initial sample. Incubate anaerobically at 25-35°C. Examine tubes daily for the first week and intermittently for up to 30 days.

### INTERPRETATION OF RESULTS

Sulfate reducing bacteria cause blackening of the medium; turbidity alone is not indicative of SRB.

### STORAGE AND TRANSPORT CONDITIONS

2-8°C away from light, until the expiry date on the label. However, our stability studies have shown that the transport at 18-25°C for 4 days, or at 35-39°C for 48 hours, does not alter in any way the performance of the product. Eliminate if signs of deterioration or contamination are evident.

### WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for professional use only and must be used by properly trained operators.

### DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

### REFERENCES

1. American Petroleum Institute Recommended Practice 28 (1959) 1<sup>st</sup> ed.



## PRODUCT SPECIFICATIONS

### NAME

SULFATE REDUCERS BROTH

### PRESENTATION

Glass tubes containing 10 ml of medium

### STORAGE

2-8°C

### PACKAGING

Ref.	Content	Packaging
24440	20 x 10 ml tubes	20 tubes in cardboard box

### pH OF THE MEDIUM

7.4 ± 0.2

### USE

SULFATE REDUCERS BROTH is a liquid medium used for the detection and enumeration of sulfate reducing bacteria (SRB) from environmental samples

### TECHNIQUE

Refer to technical sheet of the product

### APPEARANCE OF THE MEDIUM

Appearance: clear

Colour: light amber

### SHELFLIFE

2 years

### QUALITY CONTROL

- Control of general characteristics, label and print
- Sterility control  
7 days at 22 ± 1°C, in aerobiosis  
7 days at 36 ± 1°C, in aerobiosis
- Microbiological control  
Inoculum for productivity: 10-100 CFU/ml  
Inoculum for specificity: ≤10<sup>4</sup> CFU/ml  
Incubation Conditions: 30 ± 2°C for up to 1 week

### Microorganism

*Escherichia coli*

ATCC® 25922

### Growth

Good

### Colour

Amber











*Desulfovibrio desulfuricans*

DSM 1924

Good

Blackening

### TABLE OF SYMBOLS

 LOT	Batch code	 IVD	<i>In vitro</i> Diagnostic Medical Device		Manufacturer		Use by		Fragile, handle with care
 REF	Catalogue number		Temperature limitation		Contains sufficient for <n> tests		Caution, consult instruction for use		Do not reuse



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