





## **Pouch Products**

**Dip Slides** 

RAKIRO BIOTECH SYSTEMS PVT LTD WWW.BACTASLYDE.COM



# **BACTASLYDE : Comparison with Other Methods**

Methods	No. of Steps involved	Trained manpower	Pre treatment of sample	Maintenance	Convenience	Capital Investment
Plate Count Method	6	Required	Not Required	Required	Tedious	Required
Most Probable Number	6	Required	Not Required	Required	Tedious	Required
Membrane Filter	6	Required	Not Required	Required	Tedious	Required
Direct Counts	4	Required	Required	Required	Convenient	Required
Bioluminescence	3	Required	Essential	Required	Convenient	Required
Direct Epifluorescence Technique (DEFT)	6	Required	Essential	Required	Convenient	Required
BACTASLYDE	1	Not Required	Not Required	Not Required	Most Convenient	Not Required

## Easy-to-use BACTASLYDE Microbe Detection Device

## SULPHATE REDUCING BACTERIA (SRB) TEST KIT BS 115

Sulfate Reducing Bacteria (SRB) obtain energy by oxidizing organic compounds or molecular hydrogen while reducing sulfate to hydrogen sulfide. They are also known as Sulfide Generating Bacteria (SGB) and commonly found in anaerobic environments where they aid in the degradation of organic materials like secondary oil recovery effluents, estuarine waters, deep wells, cooling waters, metalworking fluids, water-based hydraulic fluids, and petroleum based products. They can survive up to 60°C and cause pitting corrosion on metal structures that are exposed to sulfate-containing water by cathodic depolarization, since sulfate is also found in some formulations in water treatment, viz, corrosion inhibitors, coolants, etc. Sulfate acts as a hydrogen acceptor produces hydrogen sulfide and ferrous sulfide. These together form a malodorous black slime. In some case bubbles of H<sub>2</sub>S rise though the water and cause objectionable odors. The corrosion of iron by sulfate reducing bacteria is rapid and unlike ordinary rusting, is not self – limiting. Our specially developed test kit with a unique 40ml sample size gives a much reproducible quantitative analysis of the SRB count in a sample.

#### Packaging



The media used in **BACTASLYDE BS-115** has been specially formulated for the growth of the sulphate utilising species, viz. Desulfovibrio, Desulfotomaculum and Desulfobacter. It contains neutralising compounds, which would nullify the effect of any inhibitor in the test sample. Hence instances of false positive (or false negative) results are greatly reduced. Conventional methods are generally riddled with many such uncertainties. BACTASLYDE BS-115 is designed to circumvent MOST uncertainties.

#### How to use

- 1. Shake the SRB media pouch of BACTASLYDE BS -115 so as to mix the contents of media properly.
- 2. Cut open the SRB media pouch and pour the contents of the pouch into the 'tube', completely.
- 3. Fill the 'tube' right upto the brim (top) with the test liquid, to exclude any air. Close the 'tube' firmly with its cap.
- 4. Invert the 'tube' to gently mix the media and the test liquid. Do not shake vigorously.
- 5. Keep the 'tube' in a standing position for incubation, at room temperature.
- 6. Do not shake/invert the 'tube' during the incubation period.
- 7. Observe for complete blackening of the contents in the 'tube' every 24 hours upto 6 days.

\*Sulphate reducing bacteria produce hydrogen sulphide as they grow, which reacts to form iron sulphide resulting in blackening of the 'tube' contents. The blackening of the media would begin at the bottom of the 'tube'. Once the process of sulphide generation begins the blackening increases fairly rapidly.

#### Interpretation



Black Hours	ening Days	SRB per 100 ml
24	1	10 <sup>5</sup>
48	2	104
72	3	10 <sup>3</sup>
96	4	10 <sup>2</sup>
120	5	10 <sup>1</sup>
144	6	<10

#### NOTE

When the blackening takes place within 12 hrs. or overnight the SRB levels could be higher than  $10^5$  per 100 ml. Wait for complete blackening of the contents of the 'tube'. However even a slight blackening on the 6 th day should be considered as positive, denoting SRB levels to be less than 10 per 100 ml.

Absolutely no blackening even on the 6th Day, denotes SRB levels to be less than 2 per 100 ml. Blackening which takes place within two hours is not to be considered positive, since this probably will be due to the presence of sulphide ion in the sample.

#### Storage

**BACTASLYDE BS-115** is best preserved in a refrigerator (15 °C - 20 °C). If a refrigerator is not available, store at room temperature in a cool place protected from heat, light and draught. If stored this way the Product will keep for 12 months from the date of manufacture. **BACTASLYDE** should not be frozen.

#### Disposal

After use pour the contents of the tube into the toilet and flush immediately. Add any disinfecting solution, eg. Dettol, Savlon, Phenol etc. in the empty tube and discard the content in the same manner as above, after a couple of hours.

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# **BACTASLYDE : Application in Different Industries**

Industry	Application	Bactaslyde Code
Paint & Pigments	Process & production waters, raw materials, Finished products (water based paint & pigments)	BS 101, BS 102, BS 103
Metal Working Fluids	Cutting oils, coolants in the sump, raw water (make-up)	BS 101, BS 103, BS 115
Cooling Water Systems	Make-up waters, cooling waters, (recirculating water, basin water) Close systems	BS 103, BS 115, BS PP1 BS 125, BS 130
Food Processing Industry	Raw materials (e.g. cream, milk, meat, fish, vegetables), Water used for production and cleaning purpose, finished products (e.g. meat / fish preparations, cakes, soups, sauces, jams, squashes,spices)	BS 101, BS 102, BS 103, BS PP2, BS PP3, BS PP4
Pulp & Paper Industry	White waters (slurry and pulp mixtures), process waters	BS 101, BS 103, BS 115 BS 125
Sugar Industry	Primary, mixed, clarified juice, process waters, finished sugar	BS 101, BS 103, BS 115
Water Treatment Chemical Manufacturers	Laboratory and onsite, evaluation of biocides	BS 103, BS 115, BS PP 1 BS 125, BS 130

Industry	Application	Bactaslyde Code		
Manufacturers Bulk Drug	Process waters, production water, (demineralized water)	BS 103, BS 115		
Manufacturers Water & Waste Water Treatment Systems	Monitoring of waste water at different stages	BS 102, BS 103, BS 115 BS 125		
Cosmetics	Process waters. (demineralized water) raw materials, finished product.	BS 101, BS 102, BS 103, BS PP 2, BS PP 3		
Dairy	Raw milk, pasteurised milk, evaluation of the cleaning-in-process.	BS 101, BS 102, BS 103 , BS PP 2, BS PP 3		
Brewery	Process waters, pasteurised Beer fermentation broth.	BS 101 , BS 102, BS 103, BS 115		
Water Based Adhesives	Process waters, raw materials, finished product	BS 101, BS 103, BS 115		
Oil and Petroleum	Injection waters, fuel (petrol, aviation)	BS 101, BS 103, BS 115		
Fisheries	Ponds, Sea water, Processed products	BS 102, BS PP 2, BS PP 3, BS PP4		
35 101 - Yeasts & Fungi + TBC BS 102 - Escherichia coli + TBC BS 103 - Pseudomonas + TBC BS 115 - SRB BS 125 - Algae Species BS PP1 - Iron Bacteria BS PP 2 - Salmonella Species BS PP 3 - Staphylococcus Species BS PP 4 - Vibrio Species. BS130 : Nitrifying / Denitrifying Bacteria				

#### **Our Other Product Range**

Analyzing Waters Anytime... Anywhere...



## Our range encompasses all known water parameters.

Acidity Alkalinity Amine Ammonium Arsenic Bromine Calcium Hardness Carbon Dioxide Chloride Chlorine Chlorine Dioxide Choloroscope Chromate Copper Dissolved Oxygen Fluoride Hydrazine Hydrogen Peroxide Iron Molybdate Nitrate Nitrite Orthophosphate pH Phosphonate Silica Sulphate Sulphite Tannin Total Hardness Turbidity Zinc





## Drinking water test kit

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