



**S a f e t y   D a t a   S h e e t**  
According to Regulation (EC) 1907/2006  
and (EU) 453/2010

**4566 Bromothymol Blue solution 0,4%**

**1. Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

Name:

Bromothymol Blue solution 0,4%

**Synonym:**

3',3''-Dibromothymolsulphonephtalein, BTB

**CAS:** [76-59-5]

**REACH Registration Number:** A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) N° 1907/2006, the annual tonnage does not require a registration, the registration is envisaged for a later registration deadline or it is a mixture.

**1.2 Relevant identified uses of the substance or mixture:**

For laboratory utilisation, analysis, research and fine chemistry.

**1.3 Identification of the company or firm:**

PANREAC QUIMICA S.L.U.

C/Garraf 2

Polígono Pla de la Bruguera

E-08211 Castellar del Vallès

(Barcelona) Spain

Tel. (+34) 937 489 400

e-mail: [product.safety@panreac.com](mailto:product.safety@panreac.com)

**1.4 Emergency telephone:**

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

**2. Identification of dangers**

**2.1 Classification of the substance or the mixture.**

**Classification Regulation (CE) n° 1272/2008.**

Flam. Liq. 2

**Classification (67/548/CEE or 1999/45/CE).**

**F** Highly flammable

R10

## **2.2 Label elements:**

### **Hazard Pictograms**



### **Signal word**

Danger

### **Hazard statements**

H225 Highly flammable liquid and vapour.

### **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

For the full text of the R-phrases mentioned in this section, see section 16.

## **2.3 Other hazards:**

No further relevant information available.

## **3. Composition/information on ingredients**

Name: Bromothymol Blue solution 0,4%

Formula: C27H28Br2O5S M.= 624,40 CAS [76-59-5]

### **COMPOSITION:**

#### **0001: Ethanol absolute**

Formula: CH3CH2OH M.= 46,07 CAS [64-17-5]

EC number (EINECS): 200-578-6

EC index number: 603-002-00-5

REACH Registration Number: 01-2119457610-43-XXXX

**Content:** >= 50 %

## **Classification Regulation (CE) nº 1272/2008.**

Flam. Liq. 2

### **Hazard Pictograms**



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P242 Use only non-sparking tools.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves, protective clothing, eye protection or face protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370+P378 In case of fire: Use for extinction.

P403+P235 Store in a well-ventilated place. Keep cool.

## **Classification (67/548/CEE or 1999/45/CE).**

**F** Highly flammable

**R11** Highly flammable.

## **4. First aid measures**

### **4.1 General indications:**

Never provide drink or induce vomiting in the event of loss of consciousness.

### **4.2 Inhaling:**

Take the person out into the fresh air. In the event sickness persists, seek medical assistance.

### **4.3 Contact with the skin:**

Wash with plenty of water. Remove contaminated clothing.

### **4.4 Eyes:**

Wash with plenty of water, keeping eyelids open. In the event of irritation, seek medical assistance.

#### **4.5 Swallowing:**

Drink large amounts of water. Induce vomiting. Do not administer emetics. Do not administer animal carbon. Do not drink milk. Call for medical help.

### **5. Firefighting measures**

#### **5.1 Suitable extinguishing media:**

Carbon dioxide (CO<sub>2</sub>). Alcohol resistant foam. Dry powder.

#### **5.2 Unsuitable extinguishing media:**

No specific data.

#### **5.3 Special hazards arising from the substance or mixture:**

Flammable. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level. Possible re-ignition. Auf Rückzündung achten  
Cool the recipients with water.

#### **5.4 Advice for firefighters:**

Suitable clothing and footwear.

### **6. Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures:**

No special indications.

#### **6.2 Environmental precautions:**

Avoid pollution of the soil, water supplies and drains.

#### **6.3 Methods and material for containment and cleaning up:**

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation.

### **7. Handling and storage**

#### **7.1 Precautions for safe handling:**

No special indications.

#### **7.2 Conditions for safe storage, including any incompatibilities:**

Well sealed containers. In well ventilated premises. Away from sources of ignition and heat.

### **8. Exposure controls/personal protection**

#### **8.1 Exposure controls:**

Ensure good ventilation and renewal of the air in the premises.

#### **8.2 Control parameters:**

VLA-ED(ethanol): 1.000 ppm = 1.910 mg/m<sup>3</sup>

#### **8.3 Respiratory protection:**

In the event of fumes forming/aerosols, use suitable respiratory protection. Filter A. Filter P.

**8.4 Hand protection:**

Use suitable gloves neopren nitrile PVC

**8.5 Eye/face protection:**

Use suitable goggles.

**8.6 Individual hygiene measures:**

Remove contaminated clothing. Wash hands before breaks and when the job is done.

**8.7 Environmental exposure controls:**

Fulfill the commitments under local environmental protection legislation.

**9. Physical and chemical properties**

Appearance: liquid

Colour: yellowish green

Granulometry: N/A

Odour: Characteristic.

pH:

N/A

Melting point/freezing point: N/A

Initial boiling point and boiling range:

N/A

Flash point: 24 °C

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits:

N/A

Vapour pressure: N/A

Vapour density: N/A

Relative density:

Insertar Aquí Grupo de repetición

(20/4) 0,932 g/ml

Solubility: Miscible with alcohol and water

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature:

N/A

Decomposition temperature: N/A

Kinematic viscosity: N/A

Dynamic viscosity:

N/A

**10. Stability and reactivity****10.1 Conditions to avoid:**

The product is chemically stable under standard ambient conditions (room temperature).

## **10.2 Incompatible materials:**

Alkaline metals. Alkaline oxides. Oxidant agents (amongst others: perchloric acid, perchlorates, halogenates, CrO<sub>3</sub>, halogen oxides, nitric acid, nitrogen oxides, non-metal oxides, chromo-sulphuric acid). Alkali-earth metals. Halogen halides. Non-metal halides. Anhydrides. Acids. Ethylene oxides. Fluorine. Hydrides. Mercury compounds. Silver compounds. Chromyl chloride.

## **10.3 Hazardous decomposition products:**

No specific data.

## **10.4 Chemical stability:**

The gases/fumes can form explosive mixtures with the air.

# **11. Toxicological information**

## **11.1 Acute toxicity:**

LD50 oral rat : 7.060 mg/kg (refers to the component with the highest toxicity)

## **11.2 Dangerous effects for health:**

If fumes inhaled: Absorption Through contact with the eyes: irritations slight If swallowed: Quickly absorbed. Systemic effects: intoxication vertigo narcosis respiratory paralysis Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

# **12. Environmental information**

## **12.1 Toxicity:**

### **- EC50 test (mg/l):**

Bacteria (Photobacterium phosphoreum) 47000 mg/l

Classification:

Toxic

Bacteria (Ps. putida) EC0 >6500 mg/l

Classification: Toxic

Algae (Sc. quadricauda) EC0 >5000 mg/l

Classification: Toxic

Algae (M. aeruginosa) EC0 >1450 mg/l

Classification: Toxic

Crustaceans (Daphnia magna) EC0 >7800 mg/l

Classification: Toxic

Fish >10.000 mg/l

Classification:

Toxic or hardly toxic

### **- Receptor medium:**

Risk for the water environment

Low

Risk for the land environment

Low

### **- Observations:**

Non-ecotoxic compound if the dumping concentration is not very high.

## **12.2 Persistence and Degradability :**

### **- Test:**

### **- Biotic degradation classification:**

BOD5/COD

Biodegradability

High, over 1/3

### **- Abiotic degradation depending on pH:**

### **- Observations:**

Easily biodegradable product.

## **12.3 Bioaccumulative potential:**

### **- Test:**

### **- Bioaccumulation:**

Risk

### **- Observations:**

Non-bioaccumulable product.

## **12.4 Mobility in soil :**

Data not available.

## **12.5 Assessment PBT and MPMB :**

Data not available.

## **12.6 Other adverse effects:**

Non-pollutant product.

If suitable handling conditions are maintained, no ecological problems are to be anticipated.

DATA BASED on the components of the preparation.

(Major component:ethanol).

## **13. Disposal considerations**

### **13.1 Waste treatment methods:**

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes.Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

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### **13.2 Contaminated containers:**

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

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## **14. Transport information**

Overland (ADR):

Technical name: FLAMMABLE LIQUID, N.O.S.

UN 1993    Class: 3    Packaging group: III (D/E)

By sea (IMDG):

Technical name: FLAMMABLE LIQUID, N.O.S.

UN 1993 Class: 3 Packaging group: III

By air (ICAI-IATA):

Technical name: Flammable liquid, n.o.s.

UN 1993 Class: 3 Packaging group: III

Packaging instructions: CAO 366 PAX 355

## **15. Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## **16. Other information**

### **Other precautionary statements**

P243 Take precautionary measures against static discharge.

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P370+P378 In case of fire: Use for extinction.

P403+P235 Store in a well-ventilated place. Keep cool.

### **Labelling (65/548/CEE or 1999/45/CE)**

R-phrases(s): **R10** Flammable.

S-phrases(s):

Version and revision date : 3 3.11.10

Date published: 3.11.10

In respect of the previous review, changes have been made to the following sections: 2, 3, 15

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.