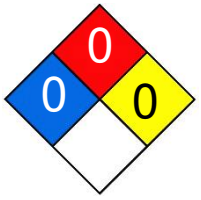
Material Safety Data Sheets



Revision 3

1. IDENTIFICATION

Product Name	**Bromophenol Blue**
Other Names	3,3',5,5'-Tetrabromophenolsulfonphthalein, BPB
Uses	used as a pH indicator, an electrophoretic color marker, and a dye
Chemical Family	No Data Available
Chemical Formula	$C_{19}H_{10}Br_4O_5S$
Chemical Name	No Data Available
Product Description	No Data Available
Company	**Arman sina.co**
Contact Information	info@armansina.com **www.armansina.com**

2. HAZARD IDENTIFICATION

Hazard Categories Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Signal Word No Data Available

Hazard Statements

Precautionary Statements No Data Available

Symbol

Supplementary information: Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Bromophenol Blue	$C_{19}H_{10}Br_4O_5S$	115-39-9	<= 100 %

4. FIRST AID MEASURES

Swallowed After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Eye After eye contact: rinse out with plenty of water. Remove contact lenses.

Skin In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Inhaled After inhalation: fresh air..

Advice to Doctor Consult a doctor in case of discomfort showing the SDS for the product.

5. FIRE FIGHTING MEASURES

General Measures Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Flammability Conditions No Data Available

Extinguishing Media Water Foam Carbon dioxide (CO2) Dry powder

Fire and Explosion Hazard No Data Available

Hazardous Products of Combustion Carbon oxides; Sulfur oxides ; Hydrogen bromide gas Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

Special Fire Fighting Instructions In the event of fire, wear self-contained breathing apparatus.

Personal Protective Equipment No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	No Data Available
Clean Up Procedures	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
Containment	No Data Available
Decontamination	No Data Available
Environmental Precautionary Measures	Do not let product enter drains.
Evacuation Criteria	No Data Available
Personal Precautionary Measures.	Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

7. HANDLING AND STORAGE

Handling	No Data Available
Storage	Tightly closed. Dry..
Container	Keep containers tightly closed

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No Data Available
Exposure Limits	No Data Available
Biological Limits	No Data Available
Engineering Measures	Change contaminated clothing. Wash hands after working with substance.
Personal Protection Equipment	**Eye/face protection** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses **Skin protection** This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L Respiratory protection Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Special Hazards Precaustions	No Data Available
Work Hygienic Practices	No Data Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Solid
Odour	characteristic
Colour	red to Pale orange solid
pH	No Data Available
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	273 °C (523 °F) - lit.
Freezing Point	No Data Available
Solubility	No Data Available
Specific Gravity	No Data Available
Flash Point	No Data Available
Auto Ignition Temp	No information available.
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	669.98 g/mol
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	No Data Available
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	No information available.
Reactions That Release Gases or Vapours	No information available.
Release of Invisible Flammable Vapours and Gases	No information available. No information available.

10. STABILITY AND REACTIVITY

General Information

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally
be assumed.

Chemical Stability

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

Conditions to Avoid

Heat.

Materials to Avoid

Violent reactions possible with: Strong oxidizing agents

Hazardous Decomposition Products

No data available

Hazardous Polymerisation

No data available

11. TOXICOLOGICAL INFORMATION

General Information

No data available

Acute

Acute toxicity
Oral: No data available
Inhalation: No data available
Dermal: No data available
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitization
No data available
Germ cell mutagenicity
No data available
Carcinogenicity
No data available
Reproductive toxicity
No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence/Degradability

No data available

Mobility

No Data Available

Environmental Fate

No Data Available

Bioaccumulation Potential

No Data Available

Environmental Impact

No Data Available

13. DISPOSAL CONSIDERATIONS

General Information

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

Special Precautions for Land Fill

No Data Available

14. TRANSPORT INFORMATION

Land Transport

Proper Shipping Name	Bromophenol Blue
Class	No Data Available
Subsidiary Risk(s)	No Data Available
EPG	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Sea Transport

Proper Shipping Name	Bromophenol Blue
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No Data Available

Air Transport

Proper Shipping Name	Bromophenol Blue
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

15. OTHER INFORMATION

Revision 3

Key/Legend

< Less Than
> Greater Than
atm Atmosphere
CAS Chemical Abstracts Service (Registry Number)
cm² Square Centimetres
CO2 Carbon Dioxide
COD Chemical Oxygen Demand
deg C (° C) Degrees Celcius
deg F (° F) Degrees Farenheit
g Grams
g/cm³ Grams per Cubic Centimetre
g/l Grams per Litre
HSNO Hazardous Substance and New Organism
IDLH Immediately Dangerous to Life and Health
immiscible Liquids are insoluable in each other.
inHg Inch of Mercury
inH2O Inch of Water
K Kelvin
kg Kilogram
kg/m³ Kilograms per Cubic Metre
lb Pound
LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or L Litre
m³ Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ Milligrams per Cubic Metre
Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight