



MATERIAL SAFETY DATA SHEET

CONTACT : **LEONID CHEMICALS**
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BROMOPHENOL BLUE

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name:
BROMOPHENOL BLUE

Catalog Numbers:
No information available.

Synonyms:
3,3',5,5'-Tetrabromophenol sulfonphthalein; 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis[2,6-dibromophenol]S,S dioxide

Company Information:
LEONID CHEMICALS
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SECTION 2- COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	115-39-9
Chemical Name	:	Unlisted.
%	:	90 - 100%
EINECS#	:	Unlisted.
Hazard Symbols	:	Unlisted.
Risk Phrases	:	Unlisted.

SECTION 3- HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION! MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

Potential Health Effects

Inhalation:
May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.



Ingestion:

Effects not determined. Large oral doses may cause irritation to the gastrointestinal tract.

Skin Contact:

May cause irritation with redness and pain.

Eye Contact:

May cause irritation, redness and pain.

Chronic Exposure:

Not determined.

Aggravation of Pre-existing Conditions:

No information available.

SECTION 4 - FIRST AID MEASURES

Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

SECTION 5 - FIRE FIGHTING MEASURES

Fire:

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Explosion:

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Fire Extinguishing Media:

Water spray, dry chemical, alcohol foam, or carbon dioxide.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container

SECTION 7 - HANDLING AND STORAGE

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

SECTION 8 - Exposure Controls, Personal Protection

Airborne Exposure Limits:
None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Tan to orange, light pink to purple or red crystalline powder.
Odor	:	Slightly amine to odorless.
Solubility	:	0.4g/100g water @ 20C (68F).
Specific Gravity	:	No information available.
PH	:	No information available.
% Volatiles by volume @ 21C (70F)	:	0
Boiling Point	:	279C (534F)
Melting Point	:	273C (523F)
Vapor Density (Air=1)	:	No information available.
Vapor Pressure (mm Hg)	:	No information available.
Evaporation Rate (BuAc=1)	:	No information available.
Molecular Weight	:	670.02
Chemical Formula	:	C ₁₉ H ₁₀ Br ₄ O ₅ S
NFPA Ratings	:	Health: 1 Flammability: 1 Reactivity: 0

SECTION 10 - STABILITY AND REACTIVITY

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Burning may produce bromines, sulfur oxides, carbon dioxide, and carbon monoxide.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Strong oxidizers.

Conditions to Avoid:

Heat, flames, ignition sources and incompatibles.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

No information available.

LD50/LC50:

No information available.

Carcinogenicity:

No information available.

Other:

No information available.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

SECTION 13 - DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14 - TRANSPORT INFORMATION

Not regulated.

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SECTION 15 - REGULATORY INFORMATION

European/International Regulations

No information available.

Hazard Symbols:

No information available.

Risk Phrases:

No information available.

Safety Phrases:

No information available.

WGK (Water Danger/Protection)
No information available.

United Kingdom Occupational Exposure Limits
No information available.

United Kingdom Maximum Exposure Limits
No information available.

Canada
No information available.

Exposure Limits
No information available.

US FEDERAL
TSCA
No information available.

SECTION 16 - ADDITIONAL INFORMATION

Label Hazard Warning:
CAUTION! MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

Label Precautions:
Avoid contact with eyes, skin and clothing.
Avoid breathing dust.
Keep container closed.
Use with adequate ventilation.
Wash thoroughly after handling.

Label First Aid:
If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Product Use:
Laboratory Reagent.

Revision Information:
No Changes.

