SECTION 1  PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: Phosphorous (III) Bromide
PRODUCT NUMBER: 2839
CAS NUMBER: 7789-60-6
SYNONYMS: Phosphorous bromide, tribromophosphine

MANUFACTURER:
Prochem, Inc.
826 Roosevelt Road
Rockford, IL 61109

PHONE: 815-398-1788
FAX: 815-398-1810
TOLL FREE: 800-795-8788

IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC: 1-800-424-9300

SECTION 2  HAZARDS IDENTIFICATION

CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram

Signal Word Danger

Hazard Statements

H300 Fatal if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

Precautionary Phrases

P260 Do not breathe dust or mist.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340+P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P363 Wash contaminated clothing before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
SECTION 2   HAZARDS IDENTIFICATION

HMIS CLASSIFICATION:
Health: 3  Fire: 0  Reactivity Hazard: 2

NFPA RATING:
Health: 3  Flammability: 0  Reactivity Hazard: 2  Specific Hazard: W

EYE CONTACT: Causes serious eye damage.
SKIN CONTACT: Causes severe skin burns.
INHALATION: May cause respiratory irritation.
INGESTION: Corrosive to the mouth, throat, and stomach.

SECTION 3   COMPOSITION / INFORMATION ON INGREDIENTS

Formula: PBr₃
Molecular Weight: 270.70

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<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
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<td>7789-60-8</td>
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SECTION 4   FIRST AID MEASURES

EYE EXPOSURE: Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

SKIN EXPOSURE: Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

INHALATION: Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

INGESTION: Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

SECTION 5   FIREFIGHTING MEASURES

FLASH POINT: Product is not flammable.
AUTO IGNITION TEMPERATURE: Not available
EXPLOSION LIMITS: Product does not present an explosion hazard.
EXTINGUISHING MEDIUM: Extinguishing powder. Do NOT use water.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Phosphorous oxides and hydrogen bromide gas.

SECTION 6   ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid the formation of dust. Avoid breathing vapors, mist, gas, or dust.
ENVIRONMENTAL PRECAUTIONS: Prevent spillage from entering drains or allowing to be released into the environment.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Use neutralizing agent. Sweep up and place in suitable container for proper disposal.

SECTION 7   HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Use with adequate ventilation. Avoid formation of dusts and aerosols. Handle under dry inert gas.

CONDITIONS FOR SAFE STORAGE: Store in cool, dry, and well-ventilated area. Protect from humidity and water. Store under dry inert gas.
SECTION 8  EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS: Contains no substances with occupational exposure limit values.
EYE PROTECTION: Wear chemical safety glasses or goggles and face shield.
SKIN PROTECTION: Wear nitrile or rubber gloves, and a complete suit protecting against chemicals.
VENTILATION: Provide local exhaust, preferably mechanical.
RESPIRATOR: Use an approved respirator.
ADDITIONAL PROTECTION: Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

SECTION 9  PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Colorless to pale yellow liquid.
ODOR: Pungent
MOLECULAR WEIGHT: 270.69
BOILING POINT: 172.9°C
MELTING POINT: -41.5°C
SPECIFIC GRAVITY: 2.852 gm/ml
VAPOR DENSITY: No data available
SOLUBILITY: Reacts violently with water.

SECTION 10  STABILITY AND REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID: Exposure to moisture. Reacts violently with water.
INCOMPATIBILITY: Oxidizing agents, strong bases, sodium oxides, potassium, alcohols, acids, water, and moisture.
DECOMPOSITION PRODUCTS: Phosphorous oxides and hydrogen bromide.

SECTION 11  TOXICOLOGICAL DATA

ACUTE TOXICITY: LD50 Oral – rat – 50mg/kg.
CARCINOGENIC EFFECTS: No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen.
MUTAGenic EFFECTS: Not available
TETRATOGENIC EFFECTS: Not available
CHRONIC TOXICITY: Not available
RTECS: TH4460000

Inorganic phosphorous compounds may cause irritation and hemorrhages in the stomach as well as liver and kidney damage. Bone structure may be acted, especially the jaw and teeth.
Inorganic bromides may produce depression, emaciation, and in severe cases, psychosis and mental deterioration. Bromoderma, a bromide rash, often occurs when bromide inhalation or administration is prolonged. This rash is usually found on the face and resembles acne and furunculosus

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

SECTION 12  ECOLOGICAL DATA

No information available

SECTION 13  DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.
SECTION 14 TRANSPORTATION DATA

UN1808
Phosphorus Tribromide
CLASS 8
PG II

Marine Pollutant: No

SECTION 15 REGULATORY INFORMATION

TSCA: Listed in the TSCA inventory
SARA 302/304: Not Listed
SARA 311/312: Acute Health Hazard
SARA (TITLE 313): Not Listed
CALIFORNIA PROP. 65: Not Listed
MASSACHUSETTS RIGHT TO KNOW COMPONENTS: No components are subject to the Massachusetts Right to Know Act.
NEW JERSEY RIGHT TO KNOW COMPONENTS: Phosphorous (III) bromide
PENNSYLVANIA RIGHT TO KNOW COMPONENTS: Phosphorous (III) bromide

SECTION 16 OTHER INFORMATION

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Prochem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.
DATE PREPARED: 05/15
SDS DEPT.