SECTION 1            PRODUCT AND COMPANY INFORMATION

PRODUCT NAME:        Bismuth (III) Chloride
PRODUCT NUMBER:      1240
CAS NUMBER:          7787-60-2
SYNONYMS:            Bismuth Trichloride, trichlorobismuth

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
Warning

Hazard Statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary Phrases

P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362 Take off contaminated clothing and wash before reuse.

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

NFPA RATING:
Health: 2  Flammability: 0  Reactivity Hazard: 0

EYE CONTACT: Causes serious eye irritation.
SKIN CONTACT: Causes skin irritation.
INHALATION: May cause irritation of the respiratory tract.
INGESTION: May be irritating if swallowed.
SECTION 3  COMPOSITION / INFORMATION ON INGREDIENTS

Formula: BiCl₃

Molecular Weight: 315.34

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<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
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<tbody>
<tr>
<td>Bismuth (III) Chloride</td>
<td>7787-60-2</td>
<td>100</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. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases, seek immediate medical assistance.

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: Not available

EXTINGUISHING MEDIUM: Use fire fighting measures that suit the surrounding fire.

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

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Hydrogen chloride gas and bismuth oxides

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: Pick up and arrange disposal without creating dust. Sweep up and keep in suitable, closed containers for disposal.

SECTION 7  HANDLING AND STORAGE

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

CONDITIONS FOR SAFE STORAGE: Store in cool, dry, and well-ventilated area.

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, apron, or lab coat.

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: White to yellowish solid

ODOR: Slight acetic acid
SECTION 9   PHYSICAL AND CHEMICAL PROPERTIES (Cont.)

MOLECULAR WEIGHT: 315.34  
BOILING POINT: 447° C  
MELTING POINT: 227°C  
SPECIFIC GRAVITY: 4.750 gm/ml  
SOLUBILITY: Soluble in methanol, diethyl ether, and acetone. Decomposes in water to bismuth oxychloride.

SECTION 10   STABILITY AND REACTIVITY

STABILITY: Stable  
HAZARDOUS POLYMERIZATION: Will not occur  
CONDITIONS TO AVOID: No data available  
INCOMPATIBILITY: Strong oxidizing agents  
DECOMPOSITION PRODUCTS: Hydrogen chloride gas and bismuth oxide

SECTION 11   TOXICOLOGICAL DATA

ACUTE TOXICITY: LD50 Oral – rat – 3,334 mg/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  
TETRATOGENTIC EFFECTS: Not available  
RTECS: EB2690000

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

SECTION 12   ECOLOGICAL DATA

No data available

SECTION 13   DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

SECTION 14   TRANSPORTATION DATA

Not a dangerous good

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  
PENNYSYLVANIA RIGHT TO KNOW: Bismuth (III) Chloride  
NEW JERSEY RIGHT TO KNOW: Bismuth (III) Chloride  
CALIFORNIA PROP. 65: Not Listed

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: 11/14