SECTION 1  PRODUCT AND COMPANY INFORMATION

PRODUCT NAME:  Gallium (III) Fluoride
PRODUCT NUMBER:  1876
CAS NUMBER:  7783-51-9
MANUFACTURER:  Prochem, Inc.
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

H314  Causes severe skin burns and eye damage.

Precautionary Phrases

P260  Do not breathe dust/fume/gas/mist/vapors/spray.
P303+P361+P353  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P330+P331  IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

HMIS CLASSIFICATION:
Health:  3   Fire:  0   Reactivity Hazard:  2
NFPA RATING:
Health:  3   Flammability:  0   Reactivity Hazard:  2

EYE CONTACT:  Causes severe eye damage.
SKIN CONTACT:  Causes severe skin burns.
INHALATION:  May cause irritation to the respiratory tract.
INGESTION:  May cause gastrointestinal irritation.
SECTION 3  COMPOSITION / INFORMATION ON INGREDIENTS

Formula: GaF$_3$

Molecular Weight: 126.72

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
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<tbody>
<tr>
<td>Gallium (III) Fluoride</td>
<td>7783-51-9</td>
<td>100</td>
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</table>

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 plenty of 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: Do not induce vomiting. Seek competent medical assistance immediately.

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: 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 fluoride and gallium oxide

SECTION 6  ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid dust formation. Avoid breathing 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. Ensure adequate ventilation. Avoid contact with skin and eyes.

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

SECTION 8  EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS:

<table>
<thead>
<tr>
<th>Component</th>
<th>Exposure Limits</th>
<th>Basis</th>
<th>Entity</th>
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<tr>
<td>Gallium (III) Fluoride</td>
<td>2.5 mg/m$^3$</td>
<td>TLV</td>
<td>ACGIH</td>
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</table>

TLV: Threshold Limit Value over 8 hours of work.
PEL: Permissible Exposure Limit

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: White solid
ODOR: None
MOLECULAR WEIGHT: 126.72
BOILING POINT: 1000° C
MELTING POINT: 800° C
SPECIFIC GRAVITY: 4.46-4.48 gm/ml
SOLUBILITY: Very slightly soluble

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID: None
INCOMPATIBILITY: Acids and alkali metals
DECOMPOSITION PRODUCTS: Hydrogen fluoride and gallium oxide

SECTION 11 TOXICOLOGICAL DATA

ACUTE TOXICITY: Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.
CARCINOGENIC EFFECTS: No component of this product present at levels greater than or equal to 0.1% is considered to be a human carcinogen.
MUTAGENIC EFFECTS: Not available
TETRATOGIC EFFECTS: Not available
CHRONIC TOXICITY: Gallium and gallium compounds may cause metallic taste, dermatitis, and depression of the bone marrow function. Large doses may cause hemorrhagic nephritis. Fluoride may cause salivation, nausea, vomiting, diarrhea, and abdominal pain, followed by weakness, tremors, shallow respiration, convulsions, and coma. May cause brain and kidney damage. Chronic fluoride poisoning can cause severe bone changes, loss of weight, anorexia, anemia, and dental defects.
RTECS: No data

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

UN3260
Corrosive solid, acidic, inorganic, n.o.s.
(Gallium (III) Fluoride)
Class 8
PG III

Marine Pollutant: No
SECTION 15   REGULATORY INFORMATION

TSCA: No data
SARA (TITLE 313): Not listed
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: 05/15
SDS DEPT.