SECTION 1  PRODUCT AND COMPANY INFORMATION

PRODUCT NAME:  Yttrium (III) sulfate octahydrate
PRODUCT NUMBER:  3870
CAS NUMBER:  7446-33-5
MANUFACTURER:  Prochem, Inc.

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

826 Roosevelt Road
Rockford, IL  61109

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. |
| H335  | May cause serious respiratory irritation. |

Precautionary Phrases

| P261  | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P305+P351+P338  | IF IN EYES:  Rinse cautiously with water for several minutes.  Remove contact lenses, if present and easy to do.  Continue rinsing. |
| P302+P352  | IF ON SKIN: Wash with plenty of soap and water. |

HMIS CLASSIFICATION:
Health: 0  Flammability: 0  Reactivity: 0

NFPA RATING:
Health: 0  Fire: 0  Reactivity Hazard: 0

EYE CONTACT:  May cause slight to mild irritation of the skin.
SKIN CONTACT:  May cause slight to mild irritation of the skin.
INHALATION:  May be irritating to the nose, mucous membranes and respiratory tract.
INGESTION:  May be harmful if swallowed.
SECTION 3  COMPOSITION / INFORMATION ON INGREDIENTS

Formula: \( Y_2(SO_4)_3 \cdot 8H_2O \)
Molecular Weight: 610.12

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
<th>ACGIH (TWA)</th>
<th>OSHA(PEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yttrium sulfate octahydrate</td>
<td>7446-33-5</td>
<td>100</td>
<td>1 mg/m3 (as Y)</td>
<td>1 mg/m3 (as Y)</td>
</tr>
</tbody>
</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 water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.
INHALATION: Remove victim to fresh air. 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 applicable
EXPLOSION LIMITS: Not applicable
EXTINGUISHING MEDIUM: Use fire fighting measures that suit the surrounding fire.
SPECIAL FIRE FIGHTING PROCEDURES: If involved in a fire, fire fighters should be equipped with a NIOSH approved positive self-contained breathing apparatus, flame and chemical resistant clothing, hats, boots, and gloves.
HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Sulfur oxides and metal oxide fume

SECTION 6  ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear approved personal protective equipment. Avoid dust formation. Avoid breathing dust, vapors, mist or gas. Ensure adequate ventilation.
ENVIRONMENTAL PRECAUTIONS: Do not let product enter drains or allow to be released into the environment.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Small spills can be mixed with powdered sodium carbonate or ground limestone and swept up.

SECTION 7  HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wear approved personal protective equipment. Avoid contact with skin and eyes. Avoid formation of dust. Ensure adequate ventilation.
CONDITIONS FOR SAFE STORAGE: Keep container tightly closed and store in a cool, dry, and well-ventilated area. Hygroscopic. Store away from oxidizing agents and moisture.

SECTION 8  EXPOSURE CONTROLS AND PERSONAL PROTECTION

EYE PROTECTION: Always wear approved safety glasses with side shields, safety goggles, or face shield when handling a chemical substance in the laboratory.
SKIN PROTECTION: Chemical resistant gloves.
VENTILATION: Handle in an efficient chemical fume hood.
RESPIRATOR: If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 19-10.134.

SECTION 9  PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: White powder
MOLECULAR WEIGHT: 610.12
BOILING POINT: No data available
MELTING POINT: No data available
SECTION 9  PHYSICAL AND CHEMICAL PROPERTIES (Cont.)

SPECIFIC GRAVITY: 2.558 gm/ml
ODOR: Odorless
VAPOR PRESSURE: No data
SOLUBILITY: Soluble

SECTION 10  STABILITY AND REACTIVITY

STABILITY: Air and moisture stable
HAZARDOUS POLYMERIZATION: No hazardous polymerization
CONDITIONS TO AVOID: Moisture
INCOMPATIBILITY: Strong oxidizing agents
DECOMPOSITION PRODUCTS: Sulfur oxides and metal oxide fume

SECTION 11  TOXICOLOGICAL DATA

CARCINOGENIC EFFECTS: No components of this product present at levels greater than or equal to 0.1% is identified as a confirmed carcinogen by IARC, ACGIH, NTP, and OSHA.
MUTAGENIC EFFECTS: Not available
TETRATOGIC EFFECTS: No data available

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

Non-hazardous material

SECTION 15  REGULATORY INFORMATION

TSCA: Not listed in the TSCA inventory
SARA 313 COMPONENTS: This material does not contain any chemical components with know CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
OSHA: No known OSHA hazards
SARA 302 COMPONENTS: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 311/312 HAZARDS: No SARA Hazards
MASSACHUSETTS RIGHT TO KNOW COMPONENTS: No components are subject to the Massachusetts Right To Know Act.
PENNSYLVANIA RIGHT TO KNOW COMPONENTS: Yttrium (III) sulfate octahydrate
NEW JERSEY RIGHT TO KNOW COMPONENTS: Yttrium (III) sulfate octahydrate
CALIFORNIA PROP. 65 COMPONENTS: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
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: 05/14