



# MATERIAL SAFETY DATA SHEET

Manufacturer: Strem Chemicals, Inc  
7 Mulliken Way  
Newburyport, MA 01950-4098 U.S.A.  
www.strem.com

Strem Customer Service (978) 499-1600  
CHEMTREC (Emergency Only) (800) 424-9300  
Poison Center (800) 562-8236

## Section 1: Product Identification

Chemical Name: Ytterbium (III) chloride hexahydrate (99.9%-Yb) (REO)  
Product Number: 93-7003  
CAS Registry Number: 10035-01-5  
Formula:  $\text{YbCl}_3 \cdot 6\text{H}_2\text{O}$   
EINECS Number: none  
Chemical Family: metal halide  
Synonym: Ytterbium trichloride

## Section 2: Composition and Information on Ingredients

| Ingredient     | CAS Number | Percent | ACGIH (TWA) | OSHA (PEL) |
|----------------|------------|---------|-------------|------------|
| Title Compound | 10035-01-5 | 100%    | no data     | no data    |

## Section 3: Hazards Identification

Emergency Overview: Irritating to skin and eyes. Inhalation can lead to irritation of the respiratory tract.  
Primary Routes of Exposure: Ingestion, inhalation  
Eye Contact: Causes mild irritation to the eyes.  
Skin Contact: Causes slight irritation of the skin.  
Inhalation: Inhalation of dust can lead to irritation of the respiratory tract.  
Ingestion: No information is available on the physiological effects of ingestion.  
Acute Health Affects: Irritating to skin and eyes.  
Chronic Health Affects: No information available on long-term chronic effects.  
NTP: No  
IARC: No  
OSHA: No

## SECTION 4: First Aid Measures

Eye Exposure: Immediately flush the eyes with copious amounts of water for at least 10-15 minutes. A victim may need assistance in keeping their eye lids open. Get immediate medical attention.  
Skin Exposure: Wash the affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.  
Inhalation: Remove the 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 attention immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.



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### SECTION 5: Fire Fighting Measures

Flash Point: not applicable  
Autoignition Temperature: none  
Explosion Limits: none  
Extinguishing Medium: none required  
Special Fire Fighting Procedures: No special fire fighting procedures required.  
Hazardous Combustion and Decomposition Products: none  
Unusual Fire or Explosion Hazards: No unusual fire or explosion hazards.

### SECTION 6: Accidental Release Measures

Spill and Leak Procedures: Small spills can be mixed with vermiculite or sodium carbonate and swept up.

### SECTION 7: Handling and Storage

Handling and Storage: Store material in a tightly sealed container.

### SECTION 8: Exposure Controls and Personal Protection

Eye Protection: Always wear approved safety glasses when handling a chemical substance in the laboratory.  
Skin Protection: Wear appropriate chemical resistant gloves and protective clothing.  
Ventilation: Material may form a fine dust. If possible, handle the material in an efficient fume hood.  
Respirator: If ventilation is not available, a respirator should be worn. The use of respirators requires a Respiratory Protection Program to be in compliance with 29 CFR 1910.134.  
Ventilation: Material may form a fine dust. If possible, handle the material in an efficient fume hood.  
Additional Protection: No additional protection required.

### SECTION 9: Physical and Chemical Properties

Color and Form: white xtl.  
Molecular Weight: 279.40 (387.49)  
Melting Point: no data  
Boiling Point: no data  
Vapor Pressure: no data  
Specific Gravity: 2.575  
Odor: none  
Solubility in Water: very soluble

### SECTION 10: Stability and Reactivity

Stability: air and moisture stable  
Hazardous Polymerization: no hazardous polymerization  
Conditions to Avoid: none  
Incompatibility: Active metals  
Decomposition Products: Ytterbium oxychloride and water

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**SECTION 11: Toxicological Information**

RTECS Data: No information available in the RTECS files.  
Carcinogenic Effects: No data available  
Mutagenic Effects: No data available  
Tetratogenic Effects: No data available

**SECTION 12: Ecological Information**

Ecological Information: No information available

**SECTION 13: Disposal Considerations**

Disposal: Dispose of according to local, state and federal regulations.

**SECTION 14: Transportation**

Shipping Name (CFR): Non-hazardous  
Hazard Class (CFR): NA  
Additional Hazard Class (CFR): NA  
Packaging Group (CFR): NA  
UN ID Number (CFR): NA  
Shipping Name (IATA): Non-hazardous  
Hazard Class (IATA): NA  
Additional Hazard Class (IATA): NA  
Packaging Group (IATA): NA  
UN ID Number (IATA): NA

**SECTION 15: Regulatory Information**

TSCA: Not listed in the TSCA inventory.  
SARA (Title 313): Title compound not listed.  
Second Ingredient: none  
Third Ingredient: none

**SECTION 16: Other Information**

Disclaimer: The information herein is believed to be accurate and reliable as of the date compiled. However, Strem Chemicals, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information contained in this document or any use of the product based on this information.

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