



SAFETY DATA SHEET

ProChemOnline.com



SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Yttrium (III) Nitrate hydrate**

PRODUCT NUMBER: 3657

CAS NUMBER: 10361-93-0

MANUFACTURER:

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SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

Danger

Hazard Statements

H272	May intensify fire; oxidizer.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary Phrases

P210	Keep away from heat/sparks/open flames/hot surfaces.
P220	Keep/store away from clothing/combustible material.
P221	Take any precaution to avoid mixing with combustibles.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

HMS CLASSIFICATION:

Health: 1 Fire: 0 Reactivity Hazard: 2

NFPA RATING:

Health: 1 Flammability: 0 Reactivity Hazard: 2

EYE CONTACT: Causes serious eye irritation.

SKIN CONTACT: Causes skin irritation.

INHALATION: May cause respiratory tract irritation.

INGESTION: May be irritating to the nose, mucous membranes, and respiratory tract.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: $Y(NO_3)_3 \cdot XH_2O$

Molecular Weight: 274.92 (anhy.)

CHEMICAL NAME	CAS#	%
Yttrium (III) Nitrate Hydrate	10361-93-0	100

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 an oxidizer – Contact with combustible may cause fire.

AUTO IGNITION TEMPERATURE: Not available

EXPLOSION LIMITS: Not available

EXTINGUISHING MEDIUM: Use carbon dioxide, extinguishing powder or foam. Water may be ineffective but may be used for cooling exposed containers. Do NOT use halocarbon extinguisher

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

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Nitrogen oxides and yttrium oxide.

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: Mix spill with vermiculite or sodium carbonate. 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 protective gas. Substance can reduce the ignition temperature of flammable substances. This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.

CONDITIONS FOR SAFE STORAGE: Store in cool, dry, and well-ventilated area. Store under dry inert gas. This product is hygroscopic – protect from humidity and water. Keep away from heat and direct sunlight.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS:

Component	Exposure Limits	Basis	Entity
Yttrium (III) Nitrate Hydrate	1 mg/m ³	TWA	ACGIH
	1 mg/m ³	PEL	OSHA

TWA: Time Weighted Average 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

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION (Cont.)

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 off-white crystal

ODOR: None

MOLECULAR WEIGHT: 274.92 (anhy.)

BOILING POINT: No data available

MELTING POINT: No data available

SPECIFIC GRAVITY: No data available

SOLUBILITY: Soluble

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Contact with strong reducing agents or organic matter. Some nitrates can explode if heated to high temperatures. Contact with combustible material may cause fire.

INCOMPATIBILITY: Flammable substances, reducing agents, water/moisture, organic materials, metal powders, phosphorus, and sulfur.

DECOMPOSITION PRODUCTS: Nitrogen oxide and yttrium oxide.

SECTION 11 TOXICOLOGICAL DATA

ACUTE TOXICITY: LDLo Subcutaneous – mouse – 16600mg/g. (I'm not an expert, but there's only 1000mg in a gram. I believe I would also die if someone stuck 16.6 times my weight of anything in a cut) LDLo Subcutaneous – frog – 350mg/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

TETRAOGENIC EFFECTS: Not available

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

UN1447

Nitrates, inorganic, n.o.s.

(Yttrium (III) nitrate hydrate)

CLASS 5.1

PG III

Marine Pollutant: No

SECTION 15 REGULATORY INFORMATION

TSCA: Not listed in the TSCA inventory

SARA 302/304: Not Listed

SARA 311/312: Not Listed

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: No components are subject to the New Jersey Right to Know Act.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS: No components are subject to the Pennsylvania Right to Know Act.

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.