



Bayville Chemical Supply Company Inc.

70-G East Jefryn Boulevard, Deer Park, New York 11729 USA
Telephone: 631-586-4309 E-Mail: info@BayvilleChemical.net Fax: 631-254-5591

Safety Data Sheet

- **1 Identification of substance:**

- **Product details:**

- **Product name: Yttrium (III) oxide**

- **Manufacturer/Supplier:**

Bayville Chemical Supply Company Inc.
70-G East Jefryn Boulevard
Deer Park, NY 11729 USA
CHEMTREC: (800) 424-9300 / (703) 527-3887
Web Site: www.BayvilleChemical.net

- **Emergency information:**

CHEMTEL: (800) 255-3928 International CHEMTEL: (813) 248-0585

- **Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Laboratory chemicals, Synthesis of substances

- **2 Hazards identification:**

- **Classification of the substance or mixture**

- **GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Skin irritation (Category 2), H315

Specific target organ toxicity - single exposure (Category 3),
Respiratory system, H335

For the full text of the H-Statements mentioned in this Section,
see Section 16.

- **GHS Label elements, including precautionary statements**

Pictogram



Signal word

Warning

Hazard statement(s)

H315 Causes skin irritation.

H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
 P332 + P313 If skin irritation occurs: Get medical advice/ attention.
 P362 Take off contaminated clothing and wash before reuse.
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/ container to an approved waste disposal plant.

- **Hazards not otherwise classified (HNOC) or not covered by GHS** - none

- **3 Composition/Data on components:**

- **Substances**

Formula : Y₂O₃

Molecular weight : 225.81 g/mol

CAS-No. : 1314-36-9

EC-No. : 215-233-5

- **Hazardous components**

Component	Classification	Concentration
Yttrium oxide	Skin Irrit. 2; STOT SE 3; H315,H335	≤ 100 %

- For the full text of the H-Statements mentioned in this Section, see Section 16.

- **4 First aid measures**

- **After inhalation:** Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.
 - **After skin contact:** Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.
 - **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
 - **After swallowing:** Rinse mouth with water. Seek medical treatment.

- **5 Fire-fighting measures**

- **Suitable extinguishing agents:** Product is not flammable. Use fire fighting measures that suit the surrounding fire.
 - **Protective equipment:** Wear self-contained respirator. Wear fully protective impervious suit.

- **6 Accidental release measures**

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
- **Measures for environmental protection:** Do not allow material to be released to the environment without proper governmental permits.
- **Measures for cleaning/collecting:** Pick up mechanically.
- **Additional information:**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

- **7 Handling and storage**

- **Handling**
- **Information for safe handling:**
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
The product is not flammable
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
No special requirements.
- **Information about storage in one common storage facility:**
Do not store together with acids.
Store away from air. Storage Class (TRGS 510): Non Combustible Solids
- **Further information about storage conditions:**
This product is hygroscopic.
Store under dry inert gas.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

- **8 Exposure controls and personal protection**

- **Control parameters**
- **Components with workplace control parameters**

Component	CAS-No.	Value	Control parameters	Basis
Yttrium oxide	1314-36-9	TWA	1.000000mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Pulmonary fibrosis		
		TWA	1 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
		Pulmonary fibrosis		

		TWA	1.000000mg/m ³	USA. NIOSH Recommended Exposure Limits
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- **Exposure controls**

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril®

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril®

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection: impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU) .

- **Control of environmental exposure:** Do not let product enter drains.

- **9 Physical and chemical properties:**

- **General Information**

- **Form:** Powder
 - **Color:** White to Light yellow
 - **Odor:** Odorless
 - **Odor threshold:** No data available
 - **pH:** No data available
 - **Melting point/Melting range:** 2410°C
 - **Boiling point/Boiling range:** 4300°C
 - **Flash point:** Not applicable
 - **Evaporation rate:** No data available
 - **Flammability (solid, gaseous)** Product is not flammable.
 - **Explosion limits:**
 - Lower:** Not determined
 - Upper:** Not determined
 - **Vapor pressure:** Not determined
 - **Density: (at 20°C)** 5.01 g/cm³
 - **Solubility in / Miscibility with water:** Insoluble
 - **Partial coefficient: n-octanol/water:** No data available
 - **Auto-ignition temperature:** No data available
 - **Decomposition temperature:** No data available
 - **Viscosity:** No data available
 - **Explosive properties:** No data available
 - **Oxidizing properties:** No data available
 - **Other safety data:** No data available

- **10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:**
Decomposition will not occur if used and stored according to specifications.
 - **Materials to be avoided:**
Water, Strong acids, Carbon dioxide (CO₂), Ammonium salts.
 - **Dangerous reactions:** No dangerous reactions known
 - **Dangerous products of decomposition:** None known.

- **11 Toxicological information**

- **Information on toxicological effects**
 - Acute toxicity:** No data available
 - Inhalation:** No data available
 - Dermal:** No data available
 - LD50 Intraperitoneal - Rat -** 230 mg/kg

Skin corrosion/irritation: No data available
Serious eye damage/eye irritation: No data available
Respiratory or skin sensitization: No data available
Germ cell mutagenicity: No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

Additional Information

RTECS: ZG3850000

Rare earth compounds may cause delayed blood clotting leading to hemorrhages. Inhalation of rare earths may cause sensitivity to heat, itching, and increased awareness of odor and taste., Coagulation abnormalities., Gastrointestinal disturbance, Skin contact or inhalation may result in:, Asthma, Cough, muscles, Damage to the lungs., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

• **12 Ecological information:**

Toxicity: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: No data available

• **13 Disposal considerations**

- **Product:**
- **Recommendation**
Consult state, local or national regulations to ensure proper disposal.
- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.

- **14 Transport information**

Not a hazardous material for transportation.

- **DOT regulations:**
- **Hazard class:** None
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** None
- **Maritime transport IMDG:**
- **IMDG Class:** None
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** None
- **Transport/Additional information:**
Not dangerous according to the above specifications.

- **15 Regulations**

- **SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- **SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
- **SARA 311/312 Hazards**
Acute Health Hazard
- **Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.
- **Pennsylvania Right To Know Components**

	CAS-No.	Revision Date
Yttrium oxide	1314-36-9	

- **New Jersey Right To Know Components**

	CAS-No.	Revision Date
Yttrium oxide	1314-36-9	

- **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.

- **16 Other information:**

- **Full text of H-Statements referred to under sections 2 and 3.**

H315 Causes skin irritation.

H335 May cause respiratory irritation.

Skin Irrit. Skin irritation

STOT SE Specific target organ toxicity - single exposure

- **HMIS Rating**

Health hazard: 2

Chronic Health Hazard:

Flammability: 0

Physical Hazard: 0

- **NFPA Rating**

Health hazard: 2

Fire Hazard: 0

Reactivity Hazard: 0

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Revision Date: 12/05/2018

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