

# SAFETY DATA SHEET

Date Printed: 05/10/2024

Date Revised: 01/15/2022

---

## SECTION 1. IDENTIFICATION

**Product Identifier:** (5N) 99.999% Yttrium Nitride

**Product Code:** Y-N-05

**CAS Number:** 25764-13-0

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

---

## SECTION 2. HAZARDS IDENTIFICATION

This substance is not classified as dangerous according to Directive 67/548/EEC.

Physical hazards

Not classified as a physical hazard.

Health hazards

Not classified as a health hazard.

Environmental hazards

Not classified as an environmental hazard.

No hazards resulting from the material as supplied.

---

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components: Yttrium nitride

Cas-No.: 25764-13-0

EC-No.: 247-248-8

---

## SECTION 4. FIRST AID MEASURES

#### Inhalation

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

#### Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

#### Eye contact

Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.

#### Ingestion

Rinse mouth. If ingestion of a large amount does occur, call a poison control centre immediately.

#### General advice

If you feel unwell, seek medical advice (show the label where possible).

---

## **SECTION 5. FIREFIGHTING MEASURES**

#### Suitable extinguishing media

Water.

#### Fire fighting equipment/instructions

In the event of fire, cool tanks with water spray.

#### Specific methods

Cool containers exposed to flames with water until well after the fire is out.

---

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### Containment procedures

Stop the flow of material, if this is without risk.

#### Personal precautions

Local authorities should be advised if significant spillages cannot be contained. Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up.

#### Environmental precautions

Prevent further leakage or spillage if safe to do so.

#### Methods for cleaning up

Small Dry Spills: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

---

## **SECTION 7. HANDLING AND STORAGE**

#### Handling

Avoid prolonged exposure. Use care in handling/storage.

#### Storage

Store in original tightly closed container. Store in accordance with local/regional/national/international regulation.

---

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Recommended monitoring procedures

Additional exposure data

Not available.

Engineering measures

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection

Not normally needed.

Eye protection

Not normally needed.

Skin and body protection

Normal work clothing (long sleeved shirts and long pants) is recommended.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practices.

---

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state: Solid.

Form: Solid.

Colour: Not available.

Odor: Not available.

Odor threshold: Not available.

pH: Not available.

Boiling point: Not available.

Flash point: Not available.

Flammability limits in air, upper, % by volume: Not available.

Flammability limits in air, lower, % by volume: Not available.

Vapor pressure: < 0,0000001 kPa at 25 °C

Relative density: Not available.

Solubility (water): Not available.

Partition coefficient (n-octanol/water): Not available.

Viscosity: Not available.

Vapor density: Not available.

Evaporation rate: Not available.

Melting point/freezing point: Not available.

Auto-ignition temperature: Not available.

VOC: Not available.

Molecular formula: NY

---

## SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid

None under normal conditions.

Hazardous decomposition products

No hazardous decomposition products are known.

Stability  
Material is stable under normal conditions.

---

## **SECTION 11. TOXICOLOGICAL INFORMATION**

Routes of exposure  
Inhalation.  
Chronic toxicity  
Prolonged inhalation may be harmful.  
Carcinogenicity  
Not classifiable as to carcinogenicity to humans.  
Mutagenicity  
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.  
Reproductivity  
Not classified.  
Epidemiology  
No epidemiological data is available for this product.

---

## **SECTION 12. ECOLOGICAL INFORMATION**

Aquatic Toxicity: Low  
Persistent Bioaccumulation Toxicity: No  
Very Persistent, Very Bioaccumulative: No  
Notes: N/A

---

## **SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal instructions  
Collect and reclaim or dispose in sealed containers at licensed waste disposal site.  
Waste from residues / unused products  
Dispose of in accordance with local regulations.  
Contaminated packaging  
Empty containers should be taken to an approved waste handling site for recycling or disposal.

---

## **SECTION 14. TRANSPORT INFORMATION**

Hazardous:  
Not hazardous for transportation.  
Hazard Class: N/A  
Packing Group: N/A  
UN Number: N/A  
Proper Shipping Name: N/A

---

## SECTION 15. REGULATORY INFORMATION

Regulatory information

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product does not need to be labelled in accordance with EC directives or respective national laws.

Labeling

Contains

Yttrium nitride

EC number

247-248-8

R-phrases(s)

None.

S-phrases(s)

None.

---

## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.