

SAFETY DATA SHEET

Date Printed: 05/10/2024

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SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Yttrium Carbide

Product Code: Y-C-05

CAS Number: 12071-35-1

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

Statement of Hazard:

Flammable solid, Irritant, Respiratory irritant

Acute Health Hazard:

Irritant to eyes, skin, mucous membranes and respiratory system.

May be harmful by ingestion, skin absorption and inhalation.

Chronic Health Hazard:

Not Available

HMIS Rating:

H: 1

F: 3

P: 1

NFPA Rating:

H: 1

F: 2

R: 1

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

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

Acute toxicity, dermal (Category 4), H312

Acute toxicity, inhalation (Category 4), H332

Acute toxicity, oral (Category 4), H302
Flammable solids (Category 1), H228
Serious eye damage/eye irritation (Category 2A), H319
Skin corrosion/irritation (Category 2), H315
Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3), H335
Pictogram:



Signal Word:

Warning

Hazard Statement(s):

H228 Flammable solid.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

Precautionary Statement(s):

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P240 Ground/bond container and receiving equipment.

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 IF SWALLOWED: call a POISON CENTER or doctor/physician

IF you feel unwell.

P302+P352 IF ON SKIN: wash with plenty of soap and water.

P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 IF SKIN irritation occurs: Get medical advice/attention.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name:

Yttrium carbide

Synonyms:

Yttrium dicarbide

Cas number:

12071-35-1

SECTION 4. FIRST AID MEASURES

Eye Contact: Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.

Skin Contact: Wash skin with soap and water. If irritation persists, seek medical attention.

Ingestion: Do not induce vomiting. Seek medical attention.

Inhalation: Move to a fresh air environment. Contact a physician if breathing

becomes difficult.

SECTION 5. FIREFIGHTING MEASURES

Flash Point (°C): Not Available

Explosion Limits: Not Available

Auto Ignition Temperature (°C): Not Available

Extinguishing Media: Carbon dioxide, dry chemical powder, alcohol-resistant foam, or water spray

Protective Equipment: Wear self-contained respirator and fully protective impervious suit.

Specific Hazards: May emit hazardous fumes under fire conditions

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection:

Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls.

Dispose of coveralls after use. Remove from ignition sources if safe to do so. Follow emergency response plan and contact proper authorities if needed.

Keep unprotected persons away.

Environmental Protection:

Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite.

Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

SECTION 7. HANDLING AND STORAGE

Handling and Storage:

Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.

Store in a tightly closed container in a dry, well-ventilated place.

Sensitivities:

Moisture

Storage Temperature (°C):

15 to 30

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Use product in a well ventilated area or under a fume hood. Use proper lab equipment while handling this product. Keep away from incompatible materials for possible risk of hazardous reaction.

Eye Protection:

Wear appropriate protective eyeglass or chemical safety goggles. Make sure that there is an eyewash station in your vicinity.

Skin Protection:

Wear impervious gloves and protective clothing.

Respiratory Protection:

Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid
Odor: Odorless
Odor Threshold: Not Available
Flash Point (°C): Not Available
Auto Ignition Temperature (°C): Not Available
UEL % by Volume: Not Available
LEL % by Volume: Not Available
Melting Point (°C): Not Available
Boiling Point (°C): Not Available
Evaporation Rate: Not Available
pH Value: Not Available
Density (g/cm³): 4.13
Refractive Index (n_D²⁰): Not Available
Viscosity: Not Available
Solubility in Water: Not Available
Solubility in Other: Not Available
Vapor Pressure (mmHg): Not Available
Vapor Density (Air=1): Not Available

SECTION 10. STABILITY AND REACTIVITY

Stability:
Stable under normal temperatures and pressures.
Incompatibility:
Strong oxidizing agents, Strong acids
Reactivity:
Product may react with incompatible materials to release other hazardous substances.
Conditions to Avoid:
Heat, flame, sparks, other ignition sources.
Hazardous Decomposition Products:
Carbon oxides, Yttrium oxides

SECTION 11. TOXICOLOGICAL INFORMATION

RTECS Reference: Not Available
Target Organs: Not Available
Toxicity Data: Not Available
Carcinogenicity:
National Toxicology Program (NTP) listed: Not Available
International Agency for Research on Cancer (IARC) listed: Not Available
Potential Symptoms: Not Available

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:
Not Available

SECTION 13. DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

SECTION 14. TRANSPORT INFORMATION

UN-Number
DOT, IMDG, IATA
UN3178
UN proper shipping name
DOT
Flammable solid, inorganic, n.o.s. (Yttrium carbide)
IMDG, IATA
FLAMMABLE SOLID, INORGANIC, N.O.S. (Yttrium carbide)
Transport hazard class(es)
DOT
Class
4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
Label
4.1
Class
4.1 (F3) Flammable solids, self-reactive substances and solid desensitised explosives
Label
4.1
IMDG, IATA
Class
4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
Label
4.1
Packing group
DOT, IMDG, IATA
III
Environmental hazards:
Not applicable.
Special precautions for user
Warning: Flammable solids, self-reactive substances and solid desensitised explosives
EMS Number:
F-A,S-G
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.
Transport/Additional information:
DOT
Marine Pollutant (DOT):
No
UN "Model Regulation":

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARA Section 313 (specific toxic chemical listings)

Substance is not listed.

California Proposition 65

Prop 65 - Chemicals known to cause cancer

Substance is not listed.

Prop 65 - Developmental toxicity

Substance is not listed.

Prop 65 - Developmental toxicity, female

Substance is not listed.

Prop 65 - Developmental toxicity, male

Substance is not listed.

Information about limitation of use:

For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.

Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use)

Substance is not listed.

REACH - Pre-registered substances

Substance is listed.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

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.