

# SAFETY DATA SHEET

Date Printed: 05/09/2024

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## SECTION 1. IDENTIFICATION

**Product Identifier:** (5N) 99.999% Chromium Vanadium Sputtering Target

**Product Code:** CR-V-05-ST

**CAS Number:** 89559-65-9

**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

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## SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

No known OSHA hazards

HMIS Classification

Health hazard: 0

Flammability: 0

Physical hazards: 0

NFPA Rating

Health hazard: 0

Fire: 0

Reactivity Hazard: 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Ingestion May be harmful if swallowed.

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### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Composition (wt%)

Cr: 5

V: 95

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### **SECTION 4. FIRST AID MEASURES**

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

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### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

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

Personal precautions

Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions

No special environmental precautions required.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

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

Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

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

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate

government standards such as NIOSH (US) or CEN (EU).

Hand 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.

Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

General industrial hygiene practice.

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance

Form Solid in various forms (powder, pieces, target)

Colour grey

Safety data

pH no data available

Melting point: no data available

Boiling point: no data available

Flash point no data available

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Vapor pressure no data available

Density no data available

Water solubility no data available

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## **SECTION 10. STABILITY AND REACTIVITY**

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

no data available

Materials to avoid

Strong acids, Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Vanadium/vanadium oxides

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Acute toxicity

no data available  
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  
Carcinogenicity - rat - Intramuscular  
Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.  
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 (GHS)  
no data available  
Specific target organ toxicity - repeated exposure (GHS)  
no data available  
Aspiration hazard  
no data available  
Potential health effects  
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.  
Ingestion May be harmful if swallowed.  
Skin May be harmful if absorbed through skin. May cause skin irritation.  
Eyes May cause eye irritation.  
Additional Information

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## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity  
no data available  
Persistence and degradability  
no data available  
Bioaccumulative potential  
no data available  
Mobility in soil  
no data available  
PBT and vPvB assessment  
no data available  
Other adverse effects  
no data available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

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## **SECTION 14. TRANSPORT INFORMATION**

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

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## **SECTION 15. REGULATORY INFORMATION**

OSHA Hazards

No known OSHA hazards

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

Vanadium

CAS-No.

7440-62-2

Revision Date

2007-03-01

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

Vanadium

CAS-No.

7440-62-2

Revision Date

2007-03-01

Pennsylvania Right To Know Components

Vanadium

CAS-No.

7440-62-2

Revision Date

2007-03-01

New Jersey Right To Know Components

Vanadium

CAS-No.

7440-62-2

Revision Date

2007-03-01

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.

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## 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.