

Praseodymium Nitrate		Pricing >
Praseodymium Nitrate Solution		Pricing >
Signal Word	Warning	
Hazard Statements	H272-H315-H319-H335	
Hazard Codes	O, Xi	
Precautionary Statements	P220-P261-P305+P351+P338	
Risk Codes	8-36/37/38	
Safety Statements	17-26-27-36/37/39	
RTECS Number	TU1400000	
Transport Information	UN 1465 5.1/PG III	
WGK Germany	2	
GHS Pictograms	GHS03 Oxidizer  GHS07  GHS07  Exclamation Point	

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### **SAFETY DATA SHEET**

Date Accessed: 03/29/2024 **Date Revised:** 01/15/2022

### **SECTION 1. IDENTIFICATION**

**Product Identifiers:** All applicable American Elements product codes for CAS #15878-77-0

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: Domestic, North America +1 800-424-9300

International +1 703-527-3887

### **SECTION 2. HAZARDS IDENTIFICATION**

Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910
(OSHA HCS)
Oxidizing solids (Category 3), H272
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure
(Category 3), Respiratory system, H335
GHS Label elements, including precautionary
statements
Pictogram





Signal word Warning

Hazard statement(s)

H272 May intensify fire; oxidizer.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statement(s)

P210 Keep away from heat.

P220 Keep/Store away from clothing/ combustible materials.

P221 Take any precaution to avoid mixing with combustibles.

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

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

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

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a

position comfortable for breathing. Call a POISON

CENTER or

doctor/ physician if you feel unwell.

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.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant

foam for extinction.

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

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Formula: N3O9Pr · 6H2O Molecular weight: 435.01 g/mol

CAS-No.: 15878-77-0 EC-No.: 233-796-5

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

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

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

Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious

person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section

2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

### SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

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

Special hazards arising from the substance or mixture Nitrogen oxides (NOx), praseodymium oxides Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers.

# SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

**Environmental precautions** 

Do not let product enter drains.

Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

#### SECTION 7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of
dust and aerosols. Further processing
of solid materials may result in the formation of
combustible dusts. The potential for
combustible dust formation should be taken into
consideration before additional processing
occurs.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and wellventilated place.

hygroscopic

Storage class (TRGS 510): 5.1B: Oxidizing hazardous materials

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters Contains no substances with occupational exposure limit values.

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.

**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

Where risk assessment shows air-purifying respirators are appropriate use a fullface

particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as

a backup to engineering controls. If the respirator is the sole means of protection,

use a full-face supplied air respirator. 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.

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance Form: crystalline

Colour: light green

- b) Odour No data available
- c) Odour Threshold No data available
- d) pH No data available
- e) Melting point/freezing point

No data available

f) Initial boiling point and boiling range

No data available

- g) Flash point ()No data available
- h) Evaporation rate No data available
- i) Flammability (solid, gas)

No data available

j) Upper/lower flammability or explosive limits

No data available

- k) Vapour pressure No data available
- I) Vapour density No data available
- m) Relative density No data available
- n) Water solubility No data available
- o) Partition coefficient: n-octanol/water

No data available

p) Auto-ignition temperature

No data available

q) Decomposition temperature

No data available

- r) Viscosity No data available
- s) Explosive properties No data available

 t) Oxidizing properties The substance or mixture is classified as oxidizing with the category 3.
 Other safety information
 No data available

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

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

Strong reducing agents, Powdered metals, Strong acids

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nitrogen oxides (NOx),

praseodymium oxides

Other decomposition products - No data available

In the event of fire: see section 5

# SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 3,500 mg/kg

Remarks: (RTECS)

Skin corrosion/irritation

Serious eye damage/eye irritation

Respiratory or skin sensitisation

Germ cell mutagenicity

Carcinogenicity

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

OSHA: No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

Reproductive toxicity

Specific target organ toxicity - single exposure

Acute inhalation toxicity - Possible damages:,

mucosal irritations

Specific target organ toxicity - repeated exposure

Aspiration hazard Additional Information RTECS: TU1400000

burning sensation, Cough, wheezing, laryngitis,

Shortness of breath, Headache, Nausea,

Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties

have not been thoroughly investigated.

The following applies to nitrites/nitrates in general: methaemoglobinaemia after the uptake of large quantities.

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

### **SECTION 12. ECOLOGICAL INFORMATION**

**Toxicity** 

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow

trout) - 0.7 mg/l - 96 h Remarks: (Hommel) Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia (water flea) - < 1 mg/l - 48 h

Remarks: (Hommel)

Toxicity to algae IC50 - algae - < 1 mg/l - 72 h

Remarks: (Hommel)

Persistence and degradability Bioaccumulative potential

Mobility in soil

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical

safety assessment not required/not

conducted

Other adverse effects

# SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

**Product** 

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal

service to dispose of this material. Contaminated packaging Dispose of as unused product.

#### **SECTION 14. TRANSPORT INFORMATION**

DOT (US)

UN number: 1465 Class: 5.1 Packing group: III Proper shipping name: Didymium nitrate

Reportable Quantity (RQ): Poison Inhalation Hazard: No

**IMDG** 

UN number: 1465 Class: 5.1 Packing group: III EMS-

No: F-A, S-Q

Proper shipping name: DIDYMIUM NITRATE

**IATA** 

UN number: 1465 Class: 5.1 Packing group: III Proper shipping name: Didymium nitrate

### SECTION 15. REGULATORY INFORMATION

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.

Massachusetts Right To Know Components No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components Praseodymium(III) nitrate hexahydrate CAS-No. 15878-77-0

Revision Date

2007-03-01

New Jersey Right To Know Components Praseodymium(III) nitrate hexahydrate CAS-No.

15878-77-0 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.

### 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.