



(Praseodymium Fluoride Powder) DATE PREPARED: 3/11/2016

Section 1. Product and Company Identification

Product Name Praseodymium Fluoride Powder

13709-46-1 **CAS Number**

Parchem - fine & specialty chemicals

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EMERGENCY RESPONSE NUMBER

Collect Calls Accepted

CHEMTEL

Section 2. Hazards Identification

Classification of the substance or mixture Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)

Acute Tox. 3 H331 Toxic if inhaled. Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation.

GHS Label Elements

Pictograms:



Signal word: DANGER

Hazard and precautionary statements **Hazard Statements**

H302+H312 Harmful if swallowed or in contact with skin.

H331 Toxic if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary Statements

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

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





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

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

HMIS Rating

Health: 2

Flammability: 0
Reactivity: 1

Other Hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable

Section 3. Composition / Information on Ingredients

Common Name Praseodymium Fluoride Powder **Synonym(s)** Praseodymium (III) Fluoride

CAS Number 13709-46-1

Section 4. First Aid Measures

Description of first-aid measures

Inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

Skin contact: Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

Eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor. **Ingestion:** Seek medical treatment.

Information for doctor

Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed: No further relevant information available.

Section 5. Firefighting Measures

Extinguishing Media

Suitable extinguishing agents: Carbon dioxide, extinguishing powder, or water spray. Fight larger fires with water spray or alcohol resistant foam.



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Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released: Hydrogen fluoride
(HF); Metal oxide fume

Advice for firefighters

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

Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Environmental precautions: Do not allow material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up: Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation.

Prevention of secondary hazards: No special measures required.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7. Handling and Storage

Handling

Precautions for safe handling: Handle under dry protective gas. Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. **Information about protection against explosions and fires:** No information known.

Conditions for safe storage, including any incompatibilities Storage

Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from water/moisture. Do not store together with acids. Store away from reducing agents.

Further information about storage conditions: Store under dry inert gas. This product is hygroscopic. Keep container tightly sealed. Store in cool, dry conditions in well-sealed containers. Protect from humidity and water.

Section 8. Exposure Controls / Personal Protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.



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Control parameters

Components with limit values that require monitoring at the workplace:

13709-46-1 Praseodymium (III) fluoride, anhydrous (100.0%), PEL (USA)

Long-term value: 2.5 mg/m³ as F, REL (USA) Long-term value: 2.5 mg/m³ as F, TLV (USA) Long-term value: 2.5 mg/m³ as F, BEI

EL (Canada) Long-term value: 2.5 mg/m³ as F

Ingredients with biological limit values:

13709-46-1 Praseodymium(III) fluoride, anhydrous (100.0%)

BEI (USA) 2 mg/L

Medium: urine

Time: prior to shift

Parameter: Fluoride (background, nonspecific)

3 mg/L

Medium: urine Time: end of shift

Parameter: Fluoride (background, nonspecific)

Additional information: No data

Exposure controls

Personal protective equipment: General protective and hygienic measures. The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment.

Breathing equipment: Use suitable respirator when high concentrations are present.

Protection of hands: Impervious gloves

Check protective gloves prior to each use for their proper condition.

The selection of suitable gloves not only depends on the material, but also on quality. Quality will

vary from manufacturer to manufacturer.

Penetration time of glove material (in minutes): Not determined

Eye protection: Safety glasses

Body protection: Protective work clothing

Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance: Various forms (powder/flake/crystalline/beads, etc.)

Color: Green
Odor: Odorless

Odor Threshold: Not determined.





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pH Value: Not applicable.

Change in condition Melting point/Melting range: 1395°C (2543°F)

Boiling point/Boiling range: Not determined Sublimation temperature/start: Not determined Flammability (solid, gaseous): Not determined.

Ignition temperature: Not determined

Decomposition temperature: Not determined

Auto igniting: Not determined.

Danger of explosion: Not determined.

Explosion limits

Lower: Not determined **Upper:** Not determined

Vapor pressure: Not applicable.

Density (20°C/68°F): 6.2 g/cm³ (51.739 lbs/gal)

Relative density: Not determined.
Vapor density: Not applicable.
Evaporation rate: Not applicable.

Solubility in/Miscibility with Water: Insoluble

Partition coefficient (n-Octanol/Water): Not determined.

Viscosity

Dynamic: Not applicable. **Kinematic:** Not applicable.

Other information: No further relevant information available

Section 10. Stability and Reactivity

Reactivity: No information known.

Chemical stability: Stable under recommended storage conditions.

Thermal decomposition/conditions to be avoided: Decomposition will not occur if used and

stored according to specifications.

Possibility of hazardous reactions: No dangerous reactions known

Conditions to avoid: No further relevant information available. **Incompatible materials:** Acids; Water/moisture; Reducing agents

Hazardous decomposition products: Hydrogen fluoride; Metal oxide fume

Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity: Harmful in contact with skin. Harmful if swallowed. Toxic if inhaled. Danger through skin absorption.



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LD/LC50 values that are relevant for classification: No data

Skin irritation or corrosion: Causes skin irritation. **Eye irritation or corrosion:** Causes serious eye irritation

Sensitization: No sensitizing effects known. **Germ cell mutagenicity:** No effects known.

Carcinogenicity

ACGIH A4: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.

Reproductive toxicity: No effects known.

Specific target organ system toxicity - repeated exposure: No effects known.

Specific target organ system toxicity - single exposure: May cause respiratory irritation.

Aspiration hazard: No effects known.

Subacute to chronic toxicity: No effects known.

Additional toxicological information: To the best of our knowledge the acute and chronic

toxicity of this substance is not fully known.

Section 12. Ecological Information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available. **Bioaccumulative potential:** No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.

Avoid transfer into the environment.

Results of PBT and vPvB assessment:

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects: No further relevant information available.

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.



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Section 14. Transport Information

UN Number (DOT, IMDG, IATA): UN3288

UN Proper Shipping Name: Toxic Solid, Inorganic, N.O.S. (Praseodymium (III) Fluoride,

Anhydrous)

Transport hazard class(es): Class 6.1 Toxic substances.

Packing group: PG Ⅲ

Environmental hazards: Not applicable.

Special precautions for user

Warning: Toxic substances EMS Number: F-A, S-A

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not

applicable.

Transport/Additional information

Marine Pollutant (DOT): No

UN "Model Regulation": UN3288, Toxic solid, inorganic, n.o.s. (Praseodymium(III) fluoride,

anhydrous), 6.1, III

Section 15. Regulatory Information

GHS label elements

The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

Hazard pictograms: GHS06 Signal word: DANGER

Hazard statements

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P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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



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product are listed on the Canadian Non-Domestic Substances List (NDSL).

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.

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.

Annex XIV of the REACH Regulations (requiring Authorization for use): Substance is not listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Section 16. Other Information

Disclaimer: 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.

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