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Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 13.07.2010 Revision: 13.07.2010

1 Identification of substance

**Product details** 

Praseodymium(III) chloride hydrate Trade name

Stock number:

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG Benzstrasse 3

D-76185 Karlsruhe / Germany

Product safety department.

Informing department: Emergency information:

Giftnotruf Universität Mainz / Poison Information Center Mainz www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240

2 Hazards identification

Hazard designation:

Xi Irritant

Information pertaining to particular dangers for man and environment GHS label elements

R 36 Irritating to eyes.

Warning

Prevention:

H319 - Causes serious eye irritation.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention. Response:

3 Composition/information on ingredients

Chemical characterization: Designation: (CAS#) Identification number(s):

Praseodymium(III) chloride hydrate (CAS# 19423-77-9): 100%

233-794-4

**EINECS Number:** 4 First aid measures

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek immediate medical advice.

Instantly wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

After skin contact After eye contact After swallowing

Rinse opened eye for several minutes under running water. Then consult doctor. Seek immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents Special hazards caused by the material, its products of combustion or flue gases:

Protective equipment:

CO2, extinguishing powder or water jet. Fight larger fires with water jet.

Can be released in case of fire:

Hydrogen chloride (HCI)
Wear self-contained breathing apparatus.

Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:

Measures for environmental protection: Measures for cleaning/collecting: Additional information:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

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

Collect mechanically.

See Section 7 for information on safe handling

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

7 Handling and storage

Handling Information for safe handling:

Handle under dry argon. Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

No special measures required.

Storage Requirements to be met by storerooms and

containers: Information about storage in one common

storage facility:

No special requirements.

Store away from water. Store away from oxidizing agents.

Further information about storage conditions:

This product is hygroscopic.
Protect from humidity and keep away from water.
Store under dry argon.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

8 Exposure controls and 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.

Components with critical values that require monitoring at the workplace: Additional information:

Not required. No data

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Avoid contact with the eyes. Avoid contact with the eyes and skin. Use breathing protection with high concentrations.

**Breathing equipment:** 

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Eye protection:	Safety glasses (Contd. of page 1)
Body protection:	Face protection Protective work clothing.
9 Physical and chemical properties:	
General Information	
Form: Colour: Smell:	Crystalline Green Odourless
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	Not determined Not determined Not determined
Flash point:	Not applicable
Ignition temperature:	Not determined
Decomposition temperature: Danger of explosion:	Not determined Product is not explosive.
Critical values for explosion:	Troduct is not explosive.
Lower: Upper:	Not determined Not determined
Steam pressure:	Not determined
Density	Not determined
Solubility in / Miscibility with Water:	Soluble
10 Stability and reactivity  Thermal decomposition / conditions to be avoided:  Materials to be avoided:  Dangerous reactions: Dangerous products of decomposition:	No decomposition if used and stored according to specifications. Water/moisture Oxidizing agents No dangerous reactions known Hydrogen chloride (HCI)
11 Toxicological information  Acute toxicity: Primary irritant effect: on the skin: on the eye: Sensitization: Additional toxicological information:	Irritant for skin and mucous membranes. Irritant effect. No sensitizing effect known. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
12 Ecological information:	
Additional ecological information: General notes:	Water hazard class 1 (Self-assessment): slightly hazardous for water.  Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.  Do not allow material to be released to the environment without proper governmental permits.
13 Disposal considerations	
Product: Recommendation	Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.
Uncleaned packagings: Recommendation:	Disposal must be made according to official regulations.
14 Transport information	
Land transport ADR/RID and GGVS/GGVE (cross-border/domestic) ADR/RID-GGVS/E Class: None	
Maritime transport IMDG/GGVSea: IMDG/GGVSea Class:	None
Marine pollutant:  Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class:	None
Transport/Additional information:	Not dangerous according to the above specifications.
15 Regulatory information  Designation according to EC guidelines:  Code letter and hazard designation of product:	Xi Irritant
Risk phrases: Safety phrases: National regulations	36 Irritating to eyes. 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  Employment restrictions concerning young persons must be observed.

Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals.

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Information about limitation of use:

Water hazard class:

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16 Other information:
Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet:
Contact:
Abbreviations and acronyms:

Health, Safety and Environmental Department.
Zachariah Holt
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RiD: Réglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDS: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAC): International Civil Aviation Organization
ICAC)-IT: Technical Instructions by the "International Civil Aviation Organization" (ICAC)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Society)

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