

Safety data sheet

according to Regulation (EC) No. 1907/2006



Printing date 28.08.2012

Version number 2

Revision: 28.08.2012

1 Identification of the substance/mixture and of the company/undertaking

- Product identifier

- Trade name: PILOCARPIN NITRATE ≥98.5 %, extra pure

- Article number: 7523

- CAS Number:

148-72-1

- EC number:

205-723-7

- Index number:

614-017-00-1

- Registration number

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

- Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- Application of the substance / the preparation Laboratory chemical

- Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

Carl Roth GmbH + Co. KG

Schoemperlenstraße 3-5

76185 Karlsruhe

Germany

Telefon: +49/(0)721 5606-0

Telefax: +49/(0)721 5606-149

E-Mail: sicherheit@carlroth.de

- Further information obtainable from: Department Health, Safety and Environment

- Emergency telephone number: Poison Centre Munich

Telefon +49/(0)89 19240

2 Hazards identification

- Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008



GHS06 skull and crossbones

Acute Tox. 2 H300 Fatal if swallowed.

Acute Tox. 1 H330 Fatal if inhaled.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC



T+; Very toxic

R26/28: Very toxic by inhalation and if swallowed.

- Label elements

- Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

- Hazard pictograms



GHS06

- Signal word Danger

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- **Hazard statements**

H300+H330 Fatal if swallowed or if inhaled.

- **Precautionary statements**

P260 Do not breathe dust.

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

P301 IF SWALLOWED:

P330 Rinse mouth.

P310 Immediately call a POISON CENTER or doctor/physician.

- **Other hazards**

All chemicals are potentially dangerous. They should only be handled by specially trained personnel.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Substances**

- **CAS No. Description**

148-72-1 pilocarpine nitrate

- **Identification number(s)**

- **EC number:** 205-723-7

- **Index Number:** 614-017-00-1

4 First aid measures



- **Description of first aid measures**

- **General information:**

First Aider: Pay attention to self-protection!

Immediately remove any clothing soiled by the product.

- **After inhalation:** Remove to fresh air. If breathing is difficult, give oxygen. Seek medical advice immediately.

- **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If there is any trouble seek medical help.

- **After eye contact:**

To be sure rinse opened eye under running water. If there is any trouble seek medical help.

- **After swallowing:**

Rinse out mouth and drink a glass of water. Do not induce vomiting.

Call for a doctor immediately and show the container or label.

- **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.

5 Firefighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

Use fire extinguishing methods suitable to surrounding conditions.

CO₂, powder, foam or water spray.

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- **For safety reasons unsuitable extinguishing agents:**
For this substance/mixture no limitations of extinguishing agents are given.
- **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Avoid contact with the eyes and skin.
- **Environmental precautions:** Do not allow to enter sewers/ground water or penetrate the soil.
- **Methods and material for containment and cleaning up:**
Pick up mechanically.
Avoid formation of dust
Dispose of the material collected according to regulations.
Ensure adequate ventilation.
- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Work only in fume cupboard.
Handle and open container with care.
Keep containers, equipment and working place clean.
- **Information about fire - and explosion protection:**
Dust can combine with air to form an explosive mixture.



Keep ignition sources away - Do not smoke.

- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Storage temperature: +15°C - +25 °C
Store under lock and key and with access restricted to technical experts or their assistants only.
- **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:** Not required.

· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Do not eat, drink or smoke while working.

Do not breathe dust.

Avoid contact with the eyes and skin.

Clean skin thoroughly immediately after handling the product.

· **Individual protection measures**

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

· **Respiratory protection:**



Required when dusts are generated: filter P3.

When selecting your respiratory unit: Consider the "Rules for the use of respiratory protection equipment" (BGR190).

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Nitrile, thickness: > 0.11 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

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· **Body protection:** Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:

Crystalline powder

Colour:

White

· Odour:

Odourless

· Odour threshold:

Not determined.

· pH-value:

Not applicable.

· Change in condition

Melting point/Melting range:

169-173°C

Boiling point/Boiling range:

Undetermined.

· Flash point:

No information available

· Flammability (solid, gaseous):

No information available

· Ignition temperature:

No information available

· Decomposition temperature:

No information available

· Self-igniting:

No information available

· Danger of explosion:

The product is not explosive. However, dust may form an explosive mixture with air.

· Explosion limits:

Lower:

Not determined.

Upper:

Not determined.

· Vapour pressure:

Not applicable.

· Density:

Not determined.

· Bulk density at 20°C:

ca. 460 kg/m³

· Vapour density

Not applicable.

· Evaporation rate

Not applicable.

· Solubility in / Miscibility with water at 20°C:

250 g/l

· Partition coefficient (n-octanol/water):

Not determined.

· Viscosity:

Dynamic:

Not applicable.

Kinematic:

Not applicable.

· Other information

No further relevant information available.

10 Stability and reactivity

· Reactivity

· Chemical stability

· **Thermal decomposition / conditions to be avoided:** Strong heating.· **Possibility of hazardous reactions** No information available.· **Conditions to avoid** No further relevant information available.· **Incompatible materials:** Oxidizing agents.· **Hazardous decomposition products:** In case of fire: see item 5.

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· **Additional information:**

combustible
Light-sensitive.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:** Quantitative data on the toxicity of this product are not available.

· **Specific symptoms in biological assay:** No information available.

· **Primary irritant effect:**

· **on the skin:** No information available.

· **on the eye:** No information available.

· **after inhalation:** absorption

· **Sensitization:** No sensitizing effects known.

· **Subacute to chronic toxicity:** No information available.

· **Additional toxicological information:**

Very toxic by inhalation.

Very toxic if swallowed.

· **Further information:**

To the best of our knowledge, the toxicological properties have not been thoroughly investigated. Further hazardous properties cannot be excluded.

The product should be handled with the care usual when dealing with chemicals.

· **Toxicokinetics, metabolism and distribution** No information available.

· **Acute effects (acute toxicity, irritation and corrosivity)** No information available.

· **Sensitisation** No information available.

· **Repeated dose toxicity** No information available.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** No information available

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** Quantitative data on the ecological effect of this product are not available.

· **Persistence and degradability** No further relevant information available.

· **Behaviour in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:**

· **Remark:**

Danger to drinking water if even extremely small quantities leak into the ground.

Do not allow to enter waters, waste water, or soil!

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation**

This material and its container must be disposed of as hazardous waste.

The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

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- **Uncleaned packaging:**
- **Recommendation:** Disposal according to official regulations.

14 Transport information

· UN-Number	UN2811
· ADR, IMDG, IATA	
· UN proper shipping name	2811 TOXIC SOLID, ORGANIC, N.O.S. (pilocarpine nitrate)
· ADR	TOXIC SOLID, ORGANIC, N.O.S. (pilocarpine nitrate)
· IMDG, IATA	
· Transport hazard class(es)	
· ADR, IMDG, IATA	
	
· Class	6.1 Toxic substances.
· Label	6.1
· Packing group	
· ADR, IMDG, IATA	I
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Toxic substances.
· Danger code (Kemler):	66
· 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:	
· ADR	
· Limited quantities (LQ)	0
· Transport category	1
· Tunnel restriction code	C/E
· UN "Model Regulation":	UN2811, TOXIC SOLID, ORGANIC, N.O.S. (pilocarpine nitrate), 6.1, I

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Waterhazard class:** Water hazard class 3 (Assessment by list): extremely hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases** Very toxic by inhalation and if swallowed.

· **Department issuing MSDS:** Department: Health, Safety and Environment

· **Contact:** Frau Weckemann

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

· *** Data compared to the previous version altered.**

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