

Safety data sheet

according to Regulation (EC) No. 1907/2006



Printing date 17.01.2012

Version number 1

Revision: 10.01.2012

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

- **Product identifier**
- **Trade name:** Dihydroouabain ROTICHROM® ~CHR
- **Article number:** 7197
- **CAS Number:**
1183-35-3
- **EC number:**
214-663-0
- **Relevant identified uses of the substance or mixture and uses advised against**
- **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**
Acute Tox. 2 H300 Fatal if swallowed.
Acute Tox. 2 H330 Fatal if inhaled.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
T; Toxic
R23/25: Toxic by inhalation and if swallowed.
R33: Danger of cumulative effects.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS06



GHS08

- **Signal word** Danger
- **Hazard statements**
H300 Fatal if swallowed.
H330 Fatal if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
- **Precautionary statements**
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/clothing.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P307+P311 IF exposed: Call a POISON CENTER or doctor/physician.

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- **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**
1183-35-3 (20.xi.)-3β-[(6-deoxy-α-L-mannopyranosyl)oxy]-1β,5β,11α,14,19-pentahydroxycardanolide
- **Identification number(s)**
- **EC number:** 214-663-0

4 First aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
General advice: No induce of vomiting by layman.
- **After inhalation:** Supply fresh air or oxygen; call for doctor.
- **After skin contact:**
Immediately rinse with water.
If there is any trouble seek medical help.
- **After eye contact:** Rinse opened eye for 10 minutes under running water. Then consult a doctor.
- **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.
Water, CO₂, powder, foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **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**
Ensure adequate ventilation
Avoid formation of dust.
- **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.
Dispose of the material collected according to regulations.
Ensure adequate ventilation.

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- **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**

- Handling corresponding to laboratory safety guidelines.
- Thorough dedusting.
- Ensure good ventilation/exhaustion at the workplace.
- Handle and open container with care.
- Prevent formation of dust.

- **Information about fire - and explosion protection:** Keep respiratory protective device available.

- **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 foodstuffs.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

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.
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Avoid contact with the eyes and skin.

- **Respiratory protection:**

- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- Required when dusts are generated.

- **Protection of hands:**

- Due to missing tests no recommendation to the glove material can be given for the product.



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

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- **Material of gloves**

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

- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Solid
Colour:	White
Odour:	Odourless
Odour threshold:	Not determined.

- **pH-value:** Not applicable.

- **Change in condition**

Melting point/Melting range:	115-125°C (dec.)
Boiling point/Boiling range:	Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Product is not flammable.

- **Ignition temperature:**

Decomposition temperature:	Not determined.
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- **Self-igniting:** Not determined.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

- **Vapour pressure:** Not applicable.

- **Density:** Not determined.

- **Relative density** Not determined.

- **Vapour density** Not applicable.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with water:**

Not easily soluble.

- **Segregation coefficient (n-octanol/water):** Not determined.

- **Viscosity:**

Dynamic:	Not applicable.
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Kinematic:	Not applicable.
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Other information

No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No information available.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Strong oxidizing agents.
- **Hazardous decomposition products:** No information available.

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.
- **Primary irritant effect:**
- **on the skin:** Slight irritations.
- **on the eye:** Slight irritations
- **after inhalation:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
After swallowing nausea, vomiting, stomach-ache, feeling of dizziness, impaired vision, CNS disorders, cardiac dysrhythmias, asystolia.
Danger of cumulative effects.
- **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.

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:** Do not allow to enter waters, waste water, or soil!
- **Additional ecological information:**
- **General notes:** Do not allow product to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.
This material and its container must be disposed of as hazardous waste.
- **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. ((20.xi.)-3β-[(6-deoxy-α-L-mannopyranosyl)oxy]-1β,5β,11α,14,19-pentahydroxycardanolide)
· ADR	
· IMDG, IATA	TOXIC SOLID, ORGANIC, N.O.S. ((20.xi.)-3β-[(6-deoxy-α-L-mannopyranosyl)oxy]-1β,5β,11α,14,19-pentahydroxycardanolide)
· Transport hazard class(es)	
· ADR	
	
· Class	6.1 Toxic substances.
· Label	6.1
· IMDG, IATA	
	
· Class	6.1 Toxic substances.
· Label	6.1
· Packing group	II
· ADR, IMDG, IATA	
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Toxic substances.
· Danger code (Kemler):	60
· EMS Number:	F-A,S-A
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

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· Transport/Additional information:

· ADR

· Limited quantities (LQ)

LQ18

· Tunnel restriction code

D/E

· UN "Model Regulation":

UN2811, TOXIC SOLID, ORGANIC, N.O.S. ((20.xi.)-3β-[(6-deoxy-α-L-mannopyranosyl)oxy]-1β,5β,11α,14,19-pentahydroxycardanolide), 6.1, II

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Information about limitation of use:** In dealing with chemicals the national laws must be observed.
- **Waterhazard class:** Water hazard class 3 (Self-assessment): extremely hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

- **Department issuing MSDS:** Department: Health, Safety and Environment
- **Contact:** Herr Heine
- **Abbreviations and acronyms:**

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

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.**