

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 02.02.2015

Version number 1

Revision: 02.02.2015

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

1.1 Product identifier

Trade name: ECHIMIDINE-N-OXIDE ROTICHROM® HPLC**Article number:** 8011**CAS Number:**

41093-89-4

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.

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

Application of the substance / the mixture

Laboratory chemical

1.3 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

1.4 Emergency telephone number:

Poison Centre Munich

Telefon +49/(0)89 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic 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

R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.

Xn; Harmful

R48/20/21/22: Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

Additional information: Note, not yet fully tested.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 02.02.2015

Version number 1

Revision: 02.02.2015

Trade name: ECHIMIDINE-N-OXIDE ROTICHROM® HPLC

(Contd. of page 1)

Hazard pictograms

GHS06

GHS08

Signal word Danger**Hazard statements**

H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P281 Use personal protective equipment as required.

P270 Do not eat, drink or smoke when using this product.

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

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

P309 IF exposed or if you feel unwell:

P310 Immediately call a POISON CENTER/doctor.

Additional information:

-

2.3 Other hazards

All chemicals are potentially dangerous. They are therefore only be handled by specially trained personnel with the necessary care.

Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.1 Chemical characterisation: Substances****CAS No. Description**

41093-89-4 Echimidine-N-Oxide

Identification number(s)**Formula:** C₂₀H₃₁NO₈**Molar mass [g/mol]:** 413,46**SECTION 4: First aid measures****4.1 Description of first aid measures****General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

(Contd. on page 3)

GB

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 02.02.2015

Version number 1

Revision: 02.02.2015

Trade name: ECHIMIDINE-N-OXIDE ROTICHROM® HPLC

(Contd. of page 2)

After inhalation:

Take affected persons into fresh air and keep quiet.
If breathing is difficult, give oxygen. Seek medical advice immediately.

After skin contact:

Immediately rinse with water.
After massive or prolonged skin contact:
Consult a doctor even without symptoms of poisoning.

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 then drink water.
Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

irritant effects
gastric pain
Nausea
Vomiting
Spasms
diarrhoea

Hazards

Danger of impaired breathing.
Danger of disturbed cardiac rhythm.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing agents: CO₂, powder, foam or water spray.

For safety reasons unsuitable extinguishing agents:

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

In the event of fire development of hazardous combustion gases or vapours possible.

In case of fire, the following can be released:

Nitrogen oxides (NO_x)
Carbon monoxide and carbon dioxide

5.3 Advice for firefighters**Protective equipment:**

Wear self-contained respiratory protective device.
Wear fully protective suit.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.
Avoid contact with the eyes and skin.
Use respiratory protective device against the effects of dust.

6.2 Environmental precautions

Do not allow product to reach sewage system or any water course.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 02.02.2015

Version number 1

Revision: 02.02.2015

Trade name: ECHIMIDINE-N-OXIDE ROTICHROM® HPLC

(Contd. of page 3)

6.3 Methods and material for containment and cleaning up

Pick up mechanically.

Avoid formation of dust

Dispose contaminated material as waste according to item 13.

6.4 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**7.1 Precautions for safe handling**

Work under hood.

Handle and open container with care.

Keep containers, equipment and working place clean.

7.2 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:

Keep container tightly sealed.

Store in dry conditions.

Protect from exposure to the light.

Store under lock and key and with access restricted to technical experts or their assistants only.

Recommended storage temperature: According to product specification.**7.3 Specific end use(s)**

No further relevant information available.

SECTION 8: Exposure controls/personal protection**Additional information about design of technical facilities:**

No further data; see item 7.

8.1 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.

8.2 Exposure controls**Personal protective equipment:****General protective and hygienic measures:**

Do not eat, drink or smoke while working.

Avoid contact with the eyes and skin.

Do not breathe dust.

Clean skin thoroughly immediately after handling the product.

(Contd. on page 5)

GB

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 02.02.2015

Version number 1

Revision: 02.02.2015

Trade name: ECHIMIDINE-N-OXIDE ROTICHROM® HPLC

(Contd. of page 4)

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 P2-P3.

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

Protection of hands:

Protective gloves

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

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

Value for the permeation: Level ≥ 6

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

As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR ≥ 0.11 mm

Value for the permeation: Level ≥ 6

Eye protection:

Tightly sealed goggles

Body protection:

Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties**General Information****Appearance:**

Form:	Crystalline powder
Colour:	Colourless

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 02.02.2015

Version number 1

Revision: 02.02.2015

Trade name: ECHIMIDINE-N-OXIDE ROTICHROM® HPLC

(Contd. of page 5)

Odour:	Odourless
Odour threshold:	No information available.
pH-value:	No information available.
Change in condition	
Melting point/Melting range:	164-165 °C
Boiling point/Boiling range:	No information available.
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:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	No information available.
Upper:	No information available.
Oxidizing properties:	No information available.
Vapour pressure:	No information available
Density:	No information available.
Vapour density	No information available
Evaporation rate	No information available
Solubility in / Miscibility with water:	Soluble.
Partition coefficient (n-octanol/water):	No information available
Viscosity:	
Dynamic:	No information available.
Kinematic:	No information available.
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

Light-sensitive
heat-sensitive

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

Reacts with oxidising agents.

10.4 Conditions to avoid

warmth/heat
Exposure to light

10.5 Incompatible materials:

No information available.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31



Printing date 02.02.2015

Version number 1

Revision: 02.02.2015

Trade name: ECHIMIDINE-N-OXIDE ROTICHROM® HPLC

(Contd. of page 6)

10.6 Hazardous decomposition products:

In case of fire: see item 5.

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:**

Quantitative data on the toxicity of this product are not available.
Classification was based chemically similar substances.

Primary irritant effect:**on the skin:**

Prolonged or repeated contact may cause skin irritations.
Danger through skin adsorption.

on the eye:

Slight irritations

after inhalation:

Irritation symptoms in the respiratory tract.
Absorption

Sensitisation:

No sensitising effects known.

CMR effects:**Germ cell mutagenicity:**

No information available.

Carcinogenicity:

Probably carcinogenic to humans.

Reproductive toxicity:

No information available.

Aspiration hazard:

No information available.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Additional toxicological information:**After swallowing:**

gastric pain

Nausea

Vomiting

Diarrhoea

After absorption:

CNS-disorders

Spasms

cardiac arrhythmia

respiratory paralysis

Liver damage

Symptoms may be delayed.

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.

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 02.02.2015

Version number 1

Revision: 02.02.2015

Trade name: ECHIMIDINE-N-OXIDE ROTICHROM® HPLC

(Contd. of page 7)

SECTION 12: Ecological information**12.1 Toxicity****Aquatic toxicity:**

Quantitative data on the ecological effect of this product are not available.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Ecotoxical effects:**Remark:**

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

12.5 Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects**

No further relevant information available.

SECTION 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.

Uncleaned packaging:**Recommendation:**

Disposal according to official regulations.

SECTION 14: Transport information**14.1 UN-Number****ADR, IMDG, IATA**

UN1544

14.2 UN proper shipping name**ADR**

1544 ALKALOIDS, SOLID, N.O.S. (Echimidine-N-Oxide)

IMDG, IATA

ALKALOIDS, SOLID, N.O.S. (Echimidine-N-Oxide)

(Contd. on page 9)

GB

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 02.02.2015

Version number 1

Revision: 02.02.2015

Trade name: ECHIMIDINE-N-OXIDE ROTICHROM® HPLC

(Contd. of page 8)

14.3 Transport hazard class(es)**ADR, IMDG, IATA****Class
Label**6.1 Toxic substances.
6.1**14.4 Packing group****ADR, IMDG, IATA**

III

14.5 Environmental hazards:**Marine pollutant:**

No

14.6 Special precautions for user**Danger code (Kemler):**

Warning: Toxic substances.

EMS Number:6.1
F-A, S-A**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

Transport/Additional information:**ADR****Limited quantities (LQ)****Excepted quantities (EQ)**

5 kg

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

Transport category**Tunnel restriction code**

2

E

UN "Model Regulation":

UN1544, ALKALOIDS, SOLID, N.O.S. (Echimidine-N-Oxide), 6.1, III

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations:****Information about limitation of use:**

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

Breakdown regulations:**Waterhazard class:**

Water hazard class 3 (Self-assessment): extremely hazardous for water.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

(Contd. on page 10)

GB

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 02.02.2015

Version number 1

Revision: 02.02.2015

Trade name: ECHIMIDINE-N-OXIDE ROTICHROM® HPLC

(Contd. of page 9)

SECTION 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: Frau Weckemann

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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

LD50*: Lethal Dose, 50 percent (Not relevant for classification)

LD50*: Lethal Concentration, 50 percent (Not relevant for classification)

Acute Tox. 3: Acute toxicity, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

GB