Revision date: 03/11/2017

Minocycline hydrochloride

Safety Data Sheet

Date of issue: 20/07/2012

according to Regulation (EU) 2015/830

M0172

Version: 2.0

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

| 1.1. Product identifier | |
|-------------------------|-----------------------------|
| Product form | : Substance |
| Trade name | : Minocycline hydrochloride |
| EC-No. | : 237-099-7 |
| CAS-No. | : 13614-98-7 |
| Product code | : M0172 |
| Formula | : C23H27N3O7 · HCI |
| Product group | : Raw material |
| | |

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

1.2.1. Relevant identified uses

| Main use category | : Professional use |
|----------------------------------|---|
| Industrial/Professional use spec | : For professional use only. Duchefa Biochemie B.V. products are intended |
| | only for "in vitro laboratory" research purposes. |

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Duchefa Biochemie B.V. A. Hofmanweg 71 2031 BH Haarlem - The Netherlands T +31(0)23-5319093 - F +31(0)23-5318027 info@duchefa.nl

1.4. Emergency telephone number

Emergency number

: Supplier contact information: +31(0)23-5319093 (M-F 09:00-17:00) +31(0)6-30109355 (outside office hours)

| Organisation/Company | Address | Comment |
|--|------------------------------------|---|
| World Health Organization world directory of poison centres | http://apps.who.int/poisoncentres/ | Consult website for a local poison centre |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

| Reproductive toxicity, Category 1B | H360D |
|--|-------|
| Reproductive toxicity, Additional category, Effects on or via lactation | H362 |
| Serious eye damage/eye irritation, Category 2 | H319 |
| Skin corrosion/irritation, Category 2 | H315 |
| Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation | H335 |
| | |

Full text of hazard classes and H-statements : see section 16

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Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

| Hazard pictograms (CLP) | : GHS08 GHS07 |
|--------------------------------|--|
| Signal word (CLP) | : Danger |
| Hazard statements (CLP) | H315 - Causes skin irritation H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H360D - May damage the unborn child. H362 - May cause harm to breast-fed children. |
| Precautionary statements (CLP) | P201 - Obtain special instructions before use. P280 - Wear eye protection, face protection, protective clothing, protective gloves. P263 - Avoid contact during pregnancy/while nursing. P308+P313 - IF exposed or concerned: Get medical advice/attention. |

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

| 3.1. Substances | | | |
|---------------------------|-----------------------------|--|------|
| Name | : Minocycline hydrochloride | | |
| CAS-No. | : 13614-98-7 | | |
| EC-No. | : 237-099-7 | | |
| NameProduct identifier% | | % | |
| Minocycline hydrochloride | | (CAS-No.) 13614-98-7 (EC-No.) 237-099-7 | > 96 |

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

| SECTION 4: First aid measures | | |
|--|---|--|
| 4.1. Description of first aid measures | | |
| First-aid measures after inhalation | : Move to fresh air. If you feel unwell, seek medical advice. | |
| First-aid measures after skin contact | : Wash skin with mild soap and water. Seek medical attention if ill effect or irritation develops. | |
| First-aid measures after eye contact | : Rinse immediately with plenty of water. Seek medical attention if ill effect or irritation develops. | |
| First-aid measures after ingestion | : Rinse mouth. Seek medical attention if ill effect or irritation develops. | |

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects

: This material or its emissions may induce blood disorders and/or aggravate pre-existing blood disorders. Nausea, vomiting. Dizziness.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2). Water spray.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in : Under fire conditions, hazardous fumes will be present. COx. NOx. case of fire

5.3. Advice for firefighters

| Firefighting instructions | : Avoid (reject) fire-fighting water to enter environment. |
|--------------------------------|--|
| Protection during firefighting | : Wear proper protective equipment. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

6.1.1. For non-emergency personnel

Protective equipment

: Wear suitable protective clothing.

: Avoid raising powdered materials into airborne dust.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Sweep up dry powder and dispose properly.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No additional information available

7.2. Conditions for safe storage, including any incompatibilities

| Storage conditions | : Keep container tightly closed and protected from light. Store in dry, cool, well-ventilated area. |
|---------------------|---|
| Storage temperature | : 2 - 8 °C |

7.3. Specific end use(s)

For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection:

| Туре | Material | Permeation | Thickness (mm) | Standard |
|--------|----------------------|-------------------|----------------|----------|
| Gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | 0,11 | EN 374 |

Eye protection:

Safety glasses (to European standard EN 166 or equivalent)

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear appropriate mask. Filter type P2 (EN 143)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state Appearance Molecular mass Colour Odour Odour Ddour threshold pH | Solid Powder. Crystalline powder. 493,94 g/mol Yellow. No data available No data available 3,5 - 4,5 (10 g/l, 20 °C) No data available |
|---|---|
| Relative evaporation rate (butylacetate=1) | |
| Melting point Freezing point Boiling point Flash point Auto-ignition temperature Decomposition temperature Flammability (solid, gas) Vapour pressure Relative vapour density at 20 °C Relative density Solubility | No data available 232 °C No data available |
| Log Pow Viscosity, kinematic Viscosity, dynamic Explosive properties Oxidising properties Explosive limits | : 0,05 : No data available |

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9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

This product is not hazardous.

10.4. Conditions to avoid

Light (daylight). Moisture.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes. COx. NOx.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

: Not classified

| Minocycline hydrochloride (13614-98-7) | | |
|--|---|--|
| LD50 oral rat | 2380 mg/kg | |
| LD50 oral | 3600 mg/kg (mouse) | |
| Skin corrosion/irritation | : Causes skin irritation. | |
| | pH: 3,5 - 4,5 (10 g/l, 20 °C) | |
| Serious eye damage/irritation | : Causes serious eye irritation. | |
| | pH: 3,5 - 4,5 (10 g/l, 20 °C) | |
| Respiratory or skin sensitisation | : Not classified | |
| Germ cell mutagenicity | : Not classified | |
| Carcinogenicity | : Not classified | |
| Reproductive toxicity | : May damage the unborn child. May cause harm to breast-fed children. | |
| STOT-single exposure | : May cause respiratory irritation. | |
| STOT-repeated exposure | : Not classified | |
| Aspiration hazard | : Not classified | |
| Other information | : See actual entry in RTECS for complete information: QI7630500. | |

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

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12.3. Bioaccumulative potential

| Minocycline hydrochloride (13614-98-7) | |
|--|------|
| Log Pow | 0,05 |

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information

: Prevent entry to sewers and public waters. Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IATA / IMDG

| ADR | IMDG | IATA | |
|--|---------------|---------------|--|
| 14.1. UN number | | | |
| Not regulated | Not regulated | Not regulated | |
| 14.2. UN proper shipping name | | | |
| Not regulated | Not regulated | Not regulated | |
| Not regulated | Not regulated | Not regulated | |
| | | | |
| 14.3. Transport hazard class(es) | | | |
| Not regulated | Not regulated | Not regulated | |
| Not regulated | Not regulated | Not regulated | |
| 14.4. Packing group | | | |
| Not regulated | Not regulated | Not regulated | |
| 14.5. Environmental hazards | | | |
| Not regulated | Not regulated | Not regulated | |
| No supplementary information available | | | |

14.6. Special precautions for user

Overland transport

Not regulated

- Transport by sea

Not regulated

- Air transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture 15.1.1. EU-Regulations

No REACH Annex XVII restrictions Minocycline hydrochloride is not on the REACH Candidate List Minocycline hydrochloride is not on the REACH Annex XIV List

15.1.2. National regulations

Ensure all national/local regulations are observed.

Germany

| 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV | : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance) |
|---|---|
| Netherlands | |
| SZW-lijst van kankerverwekkende stoffen | : The substance is not listed |
| SZW-lijst van mutagene stoffen | : The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding | : The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid | : The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling | : The substance is not listed |
| Denmark | |
| Recommendations Danish Regulation | Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal |

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

| 1.4 | Emergency number | Modified | |
|------|---------------------------|----------|--|
| 8.2 | Hand protection | Modified | Specified material, thickness, et cetera of gloves |
| 9.1 | Decomposition temperature | Added | |
| 11.1 | Other information | Added | RTECS no |

Abbreviations and acronyms:

| ATE | Acute Toxicity Estimate |
|-----|---|
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| BCF | Bioconcentration factor |
| CLP | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
| | |

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| DPD | Dangerous Preparations Directive 1999/45/EC |
|-------|---|
| DSD | Dangerous Substances Directive 67/548/EEC |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| PBT | Persistent Bioaccumulative Toxic |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| SDS | Safety Data Sheet |

Data sources

: ECHA (European Chemicals Agency). Supplier.

Full text of H- and EUH-statements:

| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
|---------------|--|
| Lact. | Reproductive toxicity, Additional category, Effects on or via lactation |
| Repr. 1B | Reproductive toxicity, Category 1B |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H360D | May damage the unborn child. |
| H362 | May cause harm to breast-fed children. |

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product