Safety Data Sheet

according to Regulation (EU) 2015/830 Date of issue: 03/08/2011 Revision date 06/07/2018 Supersedes 02/07/2014 A0189

Version: 2.0

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

| 1.1. Product identifier | |
|-------------------------|---|
| Product form | : Mixture |
| Trade name | : Amoxicillin sodium / Potassium Clavulanate |
| | Mixed in ratio 5:1 |
| Product code | : A0189 |
| Formula | : C16H19N3O5S (Amoxicillin sodium) / C8H8NO5K (Potassium clavulanate) |
| 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]Respiratory sensitisation, Category 1H334Skin sensitisation, Category 1H317

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

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

| Hazard pictograms (CLP) | : GHS08 |
|--|--|
| Signal word (CLP) Hazard statements (CLP) | Danger H317 - May cause an allergic skin reaction. H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Precautionary statements (CLP) | P261 - Avoid breathing dust, fume, gas, mist, spray, vapours. P280 - Wear Protective clothing, protective gloves, face shield, eye protection. P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER/doctor P302+P352 - IF ON SKIN: Wash with plenty of water. |

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|------------------------|--|------|--|
| Amoxicillin trihydrate | (CAS-No.) 61336-70-7 (EC-No.) 248-003-8 | 83,3 | Resp. Sens. 1, H334 Skin Sens. 1, H317 |
| Potassium clavulanate | (CAS-No.) 61177-45-5 (EC-No.) 262-640-9 | 16,7 | Flam. Sol. 1, H228 |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| First-aid measures general First-aid measures after inhalation | Seek medical attention if ill effect or irritation develops.Assure fresh air breathing |
|--|--|
| First-aid measures after skin contact | If experiencing respiratory symptoms: Call a poison center or a doctor. : Wash skin with plenty of water and soap |
| | Seek medical attention if ill effect or irritation develops. |
| First-aid measures after eye contact First-aid measures after ingestion | : Rinse with water. : Rinse mouth. |

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

| Symptoms/effects | : Exposure may produce an allergic reaction. |
|-----------------------------------|--|
| Symptoms/effects after inhalation | : Difficulty in breathing. |

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

No additional information available

| SECTION 5: Firefighting me | asures |
|--|--|
| 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 case of fire | : When heated to decomposition, emits toxic fumes: |
| | - COx |
| | - NOx |
| | - SOx. |
| E.O. Advice for fireficience | |

5.3. Advice for firefighters

| Firefighting instructions | : Avoid (reject) fire-fighting water to enter environment. |
|--------------------------------|---|
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| Protective equipment | : Wear suitable protective clothing. |
|----------------------------------|---|
| Measures in case of dust release | : Use good housekeeping practices to avoid rendering dust airborne. |

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. Dispose in a safe manner in accordance with local/national regulations.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Handle in accordance with good industrial hygiene and safety procedures.

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7.2. Conditions for safe storage, including any incompatibilities

| Storage conditions | : Keep container tightly closed and dry |
|---------------------|---|
| | 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.

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 approved mask. Filter type P2 (EN 143)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state Appearance Colour | : Solid : Powder. : White. |
|---|---|
| Odour Odour threshold pH Relative evaporation rate (butylacetate=1) | No data available |
| Melting point Freezing point Boiling point Flash point Auto-ignition temperature Decomposition temperature Flammability (solid, gas) Vapour pressure Relative vapour density at 20 °C | 252,6 °C No data available |
| Relative density | : No data available |

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| : Water: 222 g/l |
|---|
| : < 3 : No data available |
| : No data available : No data available |
| |

9.2. Other information

Bulk density

: 1200 kg/m³

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of storage, handling and use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

May liberate toxic gases:

- COx
- NOx
- SOx.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Acute toxicity | : Not classified | | |
|-----------------------------------|--|---|------------|
| Skin corrosion/irritation | : Not classified | | |
| Serious eye damage/irritation | : Not classified | | |
| Respiratory or skin sensitisation | : May cause allergy or asthr May cause an allergic skin | na symptoms or breathing difficulties i reaction. | f inhaled. |
| Germ cell mutagenicity | : Not classified | | |
| Carcinogenicity | : Not classified | | |
| | | | |
| Reproductive toxicity | : Not classified | | |
| STOT-single exposure | : Not classified | | |
| STOT-repeated exposure | : Not classified | | |
| Aspiration hazard | : Not classified | | |
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SECTION 12: Ecological information

12.1. Toxicity

| Amoxicillin sodium / Potassium Clav Mixed in ratio 5:1 | rulanate |
|---|-------------|
| EC50 Daphnia 1 | > 1000 mg/l |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

| Amoxicillin sodium / Potassium Clav Mixed in ratio 5:1 | rulanate |
|---|----------|
| Log Pow | < 3 |

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

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose in a safe manner in accordance with local/national regulations.

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 | | |

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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

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

15.1.2. National regulations

Ensure all national/local regulations are observed.

Germany

Reference to AwSV

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

Netherlands

SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling

Denmark

Recommendations Danish Regulation

- : Water hazard class (WGK) 3, severe hazard to waters (Classification according to AwSV, Annex 1)
- : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)
- : None of the components are listed
- : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

1.4 Emergency number

EN (English)

Modified

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| 8.2 | Hand protection | Modified | Specified material, thickness, et |
|-----|-----------------|----------|-----------------------------------|
| | | | cetera of gloves |

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 | |
| 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

: Manufacturer. ECHA (European Chemicals Agency).

Full text of H- and EUH-statements:

| Flam. Sol. 1 | Flammable solids, Category 1 | |
|---------------|--|--|
| Resp. Sens. 1 | Respiratory sensitisation, Category 1 | |
| Skin Sens. 1 | Skin sensitisation, Category 1 | |
| H228 | Flammable solid. | |
| H317 | May cause an allergic skin reaction. | |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. | |

SDS Biochemicals version 2018

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