immusmol Safety Data Sheet according to Regulation (EU) 2020/878

Date of issue: 11.08.2023

Revision date: 11.08.2023

Version/Replaced version: 07/06

The Safety Data Sheet is usable for:

| REF | Name |
|-----------|----------------------|
| FC E-3100 | Histamine Food ELISA |

FC B-3100 Histamine Food ELISA Bulk (10x)

Single components with dangerous ingredients:

| REF | Name | |
|-------------------|---------------|------------|
| BA E-0080 | Stop Solution | STOP-SOLN |
| Standards and Cor | ntrols: | |
| BA E-1001 | Standard A | STANDARD A |
| BA E-1002 | Standard B | STANDARD B |
| BA E-1003 | Standard C | STANDARD C |
| BA E-1004 | Standard D | STANDARD D |
| BA E-1005 | Standard E | STANDARD E |
| BA E-1006 | Standard F | STANDARD F |
| BA E-1051 | Control 1 | CONTROL 1 |
| BA E-1052 | Control 2 | CONTROL 2 |
| | | |

Not listed single components contain no hazardous substances in concentrations to be declared, a labelling is not required.

*i*mmus**mol**

Stop Solution BA E-0080

Safety Data Sheet

according to Regulation (EU) 2020/878

| | | Date of issue: 14.07.2023 | Revision date: - | Version/Replaced version: 1.0/- |
|----------|---------------------------------|-------------------------------|--|---------------------------------|
| OFOT | | | f the <u>s</u> - <u>s</u> | |
| SECT | ON 1: Identification of the | substance/mixture and o | t the company/underta | aking |
| 1.1. | Product identifier | | | |
| Product | form | : Mixture | | |
| Product | name | : Stop Solution BA E-0080 |) | |
| UFI | | : - | | |
| 1.2. | Relevant identified uses of the | substance or mixture and uses | advised against | |
| 1.2.1. | Relevant identified uses | | | |
| Use of t | he substance/mixture | : Laboratory reagent, Imm | unoassays | |
| | | Use by professionals. | | |
| 1.2.2. | Uses advised against | | | |
| No addi | tional information available | | | |

1.3. Details of the supplier of the safety data sheet

Supplier/Manufacturer

LDN Labor Diagnostika Nord GmbH & Co. KG Am Eichenhain 1 48531 Nordhorn, Germany T +49 (0)5921 81970 - F +49 (0)5921 8197 201 support@ldn.de

Emergency telephone number 1.4.

| Country | Organisation/Company | Address | Emergency telephone number |
|---------|--|-------------------------|----------------------------|
| Germany | LDN Labor Diagnostika Nord GmbH & Co. KG | Am Eichenhain 1 | +49 (0) 5921-81970 |
| - | | 48531 Nordhorn, Germany | (Mo-Fr 8:00-16:00) |

SECTION 2: Hazards identification

Classification of the substance or mixture 2.1.

Classification according to Regulation (EC) No. 1272/2008 [CLP] Corrosive to metals, Category 1 H290

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

May be corrosive to metals.

Label elements 2.2

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

Hazard pictograms (CLP)

| | GHS05 |
|--------------------------------|--|
| Signal word (CLP) | : Warning |
| Hazard statements (CLP) | : H290 - May be corrosive to metals. |
| Precautionary statements (CLP) | P234 - Keep only in original packaging. P390 - Absorb spillage to prevent material damage. P406 - Store in a corrosion resistant container with a resistant inner liner. |

| Deduced televities | (anytanta of the particula | < 405 mal | A second in a tel De sud ation. | | 1070/0000 [0] 01 |
|--------------------|----------------------------|-----------|---------------------------------|----------|------------------|
| Reduced labellind | (contents of the package | ≤ 125 mi |) according to Regulation | (EC) NO. | 12/2/2008 ICLPI |

| 0 (| 0 | | / |
|--------------------------------|---|---|---|
| Hazard pictograms (CLP) | | : | - |
| Signal word (CLP) | | : | - |
| Hazard statements (CLP) | | : | - |
| Precautionary statements (CLP) | | : | - |

2.3. **Other hazards**

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

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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] |
|----------------|--|---|--|
| Sulphuric acid | (CAS-No.) 7664-93-9 (EC-No.) 231-639-5 (EC Index-No.) 016-020-00-8 | < 5 Met. Corr. 1, H290 Skin Corr. 1A, H314 | |
| Name | Product identifier | Specific concentration limits according to Regulation (EC) No. 1272/2008 [CLP] | |
| Sulphuric acid | (CAS-No.) 7664-93-9 (EC-No.) 231-639-5 (EC Index-No.) 016-020-00-8 | (5 ≤ C < 15) Eye Irrit. 2, H319 (5 ≤ C < 15) Skin Irrit. 2, H315 (C ≥ 15) Skin Corr. 1A, H314 | |

Full text of H-statements: see section 16

| SECTION 4: First aid measures | |
|--|--|
| 4.1. Description of first aid measures | |
| First-aid measures general | : Get medical advice/attention if you feel unwell. If possible show him this sheet. Failing this, show him the packaging or label. Never give anything by mouth to an unconscious person. Place the affected person in the recovery position. |
| First-aid measures after inhalation | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| First-aid measures after skin contact | : Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. |
| First-aid measures after eye contact | : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| First-aid measures after ingestion | : Rinse mouth. Do NOT induce vomiting. Drink plenty of water as a precaution. |
| 4.2. Most important symptoms and effect | ets, both acute and delayed |
| Symptoms/effects | : Not expected to present a significant hazard under anticipated conditions of normal use. |
| 4.3. Indication of any immediate medica Treat symptomatically. | l attention and special treatment needed |
| SECTION 5: Firefighting measures | |
| 5.1. Extinguishing media | |
| Suitable extinguishing media | : Adapt extinguishing agents to the environment. Carbon dioxide. Foam. Dry extinguishing powder. Water spray. |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |
| 5.2. Special hazards arising from the sul | bstance or mixture |
| Hazardous decomposition products in case of fire | : Toxic gases may be formed. Carbon dioxide. Carbon monoxide. |
| 5.3. Advice for firefighters | |
| Firefighting instructions | : Prevent firefighting water from entering the environment. Use water spray or fog for cooling exposed containers. |
| Protection during firefighting | : Use a self-contained breathing apparatus and also a protective suit. |
| SECTION 6: Accidental release meas | sures |
| | uipment and emergency procedures |
| General measures | : Ensure adequate air ventilation. Avoid contact with skin and eyes. Do not breathe vapours/spray. |
| 6.1.1. For non-emergency personnel | |
| Emergency procedures | : Evacuate unnecessary personnel. |
| 6.1.2. For emergency responders | |
| Protective equipment | : Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection. |
| 6.2. Environmental precautions | |
| Prevent entry to sewers and public waters. | |
| 6.3. Methods and material for containme | ent and cleaning up |
| Methods for cleaning up | : Absorb spillage to prevent material damage. Wipe up with absorbent material (for example cloth). Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Dispose of in accordance with relevant local regulations. |

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according to Regulation (EU) 2020/878

6.4. Reference to other sections

Exposure controls and personal protection, see section 8. Concerning disposal elimination after cleaning, see section 13.

| SECTION 7: Handling and storage | |
|---|---|
| 7.1. Precautions for safe handling | |
| Precautions for safe handling | : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapour/aerosol. |
| Hygiene measures | : Handle in accordance with good industrial hygiene and safety procedures. When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |
| 7.2. Conditions for safe storage, including | ng any incompatibilities |
| Storage conditions | : Store in corrosive resistant container with a resistant inner liner. Store in original container. Keep container tightly closed. Store in a cool, well-ventilated place. Protect from direct sunlight. Keep out of frost. |
| Prohibitions on mixed storage | : Keep away from food, drink and animal feedingstuffs. |
| Incompatible materials | : Metals. |
| 7.3. Specific end use(s) | |

Laboratory reagent, Immunoassays

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Sulphuric acid (7664-93-9) | | | | |
|----------------------------|--|---|--|--|
| EU | Local name | Sulphuric acid (mist) | | |
| EU | IOEL TWA | 0.05 mg/m³ | | |
| Austria | Local name | Schwefelsäure | | |
| Austria | MAK (OEL TWA) (mg/m³) | 0.1 E mg/m ³ | | |
| Austria | MAK (OEL STEL) (mg/m³) | 0.2 E mg/m ³ | | |
| Belgium | Local name | Acide sulfurique (brume) # Zwavelzuur (nevel) | | |
| Belgium | OEL TWA (mg/m³) | 0.2 mg/m ³ | | |
| Belgium | Remark | с | | |
| Germany | TRGS 900 Local name | Schwefelsäure | | |
| Germany | TRGS 900 Occupational Exposure Limit Value (mg/m³) | 0.1 E mg/m ³ | | |
| Germany | TRGS 900 Remark | 1(I), DFG, EU, Y | | |
| Luxembourg | Local name | Acide sulfurique (brume) | | |
| Luxembourg | OEL STEL (mg/m³) | 0.05 mg/m³ | | |
| Switzerland | Local name | Schwefelsäure | | |
| Switzerland | MAK (mg/m³) | 0.1 e mg/m ³ | | |
| Switzerland | KZGW (mg/m³) | 0.2 e mg/m³ | | |
| Switzerland | Notation | C1 [#] _A , SSc | | |

8.2. Exposure controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation to minimize vapour concentrations.

Hand protection:

Wear suitable gloves (EN 374). Nitrile rubber, 0.35 mm. Butyl rubber, 0.5 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Wear safety glasses (EN 166).

Skin and body protection:

Wear suitable protective clothing.

Respiratory protection:

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Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Breathing apparatus with filter type P2.

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

| 9.1. Information on basic physical and chemical properties | | | | |
|--|---------------------|--|--|--|
| Physical state | : Liquid | | | |
| Colour | : Colourless | | | |
| Odour | : No data available | | | |
| Melting point/freezing point | : No data available | | | |
| Boiling point or initial boiling point and boiling range | : No data available | | | |
| Flammability | : No data available | | | |
| Lower and upper explosion limit | : No data available | | | |
| Flash point | : No data available | | | |
| Auto-ignition temperature | : No data available | | | |
| Decomposition temperature | : No data available | | | |
| рН | : < 1.0 | | | |
| Kinematic viscosity | : No data available | | | |
| Solubility | : No data available | | | |
| Partition coefficient n-octanol/water (log value) | : Not applicable | | | |
| Vapour pressure | : No data available | | | |
| Density and/or relative density | : No data available | | | |
| Relative vapour density | : No data available | | | |
| Particle size | : Not applicable | | | |
| | | | | |

9.2. Other information

| 9.2.1. | . Information with regard to physical hazard classes | | |
|--|--|--|--|
| Explosive properties : No explosive properties | | | |
| Oxidising properties : No oxidising properties | | | |

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3. Possibility of hazardous reactions

May be corrosive to metals.

10.4. Conditions to avoid

High temperatures.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids. Metals.

10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature. In case of fire: Toxic gases may be formed. Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

| 11.1. | Information on hazard classes as defined in Regulation (EC) No 1272/2008 | |
|----------|--|--|
| Acute to | xicity : Not classified | |

Based on available data, the classification criteria are not met

| Sulphuric acid (7664-93-9) | | |
|--|-----------------------|--|
| LD50 oral rat 2140 mg/kg | | |
| LC50 inhalation rat | 375 mg/m ³ | |
| Skin corrosion/irritation : Not classified | | |

Based on available data, the classification criteria are not met

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| Serious eye damage/irritation | : Not classified |
|--|--|
| | Based on available data, the classification criteria are not met |
| Respiratory or skin sensitisation | : Not classified |
| | Based on available data, the classification criteria are not met |
| Germ cell mutagenicity | : Not classified |
| | Based on available data, the classification criteria are not met |
| Carcinogenicity | : Not classified |
| | Based on available data, the classification criteria are not met |
| Reproductive toxicity | : Not classified |
| | Based on available data, the classification criteria are not met |
| Specific target organ toxicity (single exposure) | : Not classified |
| | Based on available data, the classification criteria are not met |
| Specific target organ toxicity (repeated | : Not classified |
| exposure) | Based on available data, the classification criteria are not met |
| Aspiration hazard | : Not classified |
| | Based on available data, the classification criteria are not met |
| 11.2. Information on other hazards | |
| Potential adverse human health effects and | : Based on available data, the classification criteria are not met |

Potential adverse human health effects and symptoms

| SECT | ION 12: Ecological information | |
|-------|--------------------------------|--|
| 12.1. | Toxicity | |

| Acute aquatic toxicity | : Not classified |
|--------------------------|------------------|
| Chronic aquatic toxicity | : Not classified |

| Sulphuric acid (7664-93-9) | |
|----------------------------|--|
| LC50 fish | > 16 - < 28 mg/l 96 h, Lepomis macrochirus |
| EC50 crustacea | > 100 mg/l 48 h, Daphnia magna |
| EC50 algae | > 100 mg/l 72 h, Desmodesmus subspicatus |
| NOEC chronic fish | 0.31 mg/l 213 d, Salvelinus fontinalis |
| NOEC chronic crustacea | 0.15 mg/l, Tanytarsus dissimilis |

12.2. Persistence and degradability

Not required for inorganic substances.

12.3. Bioaccumulative potential

Not required for inorganic substances.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

| SECTION 13: Disposal considerations | | |
|--------------------------------------|--|--|
| 13.1. Waste treatment methods | | |
| Regional legislation (waste) | : Dispose in a safe manner in accordance with local/national regulations. | |
| Waste treatment methods | : Do not empty into drains. Dispose of this material and its container in a safe way. | |
| Waste code | : The waste code number according to the Ordinance on the European Waste Catalogue depends on the waste producer and can therefore vary for any given product. The waste code number is therefore to be gleaned separately from each waste producer. | |
| SECTION 14: Transport information | | |
| In accordance with ADR / IMDG / IATA | | |

14.1. UN number or ID number UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA)

Not applicableNot applicable

: Not applicable

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| 14.2.UN proper shipping nameProper Shipping Name (ADR)Proper Shipping Name (IMDG)Proper Shipping Name (IATA) | Not applicableNot applicableNot applicable |
|--|--|
| 14.3. Transport hazard class(es) ADR | |
| Transport hazard class(es) (ADR) | : Not applicable |
| IMDG | |
| Transport hazard class(es) (IMDG) | : Not applicable |
| ΙΑΤΑ | |
| Transport hazard class(es) (IATA) | : Not applicable |
| 14.4. Packing group | |
| Packing group (ADR) | : Not applicable |
| Packing group (IMDG) | : Not applicable |
| Packing group (IATA) | : Not applicable |
| 14.5. Environmental hazards | |
| Dangerous for the environment | : No |
| Marine pollutant | : No |
| Other information | : No supplementary information available |
| 14.6 Special precautions for user | |

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments 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 substance on the REACH candidate list Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

| Water hazard class (WGK) | : WGK 1 - Slightly hazardous to water |
|--------------------------|---|
| WGK Remark | : Classification according to AwSV, Annex 1 |
| Storage class (LGK) | : LGK 10 - 13 |
| Employment restrictions | : Employment prohibitions for the protection of young people at work according to § 22 section 1(6) JArbSchG have to be observed. |

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

| SECTION 16: Other information | | |
|--|--|--|
| Data sources | REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. | |
| Changes compared to the previous version | : - | |
| Abbreviations and acronyms: | | |

 ADR
 European Agreement concerning the International Carriage of Dangerous Goods by Road

 CLP
 Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

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| <u> </u> | |
|----------|---|
| DMEL | Derived Minimal Effect Level |
| DNEL | Derived No-Effect Level |
| EC50 | The effective concentration of substance that causes 50% of the maximum response (Median Effective Concentration) |
| IATA | International Air Transport Association |
| IMDG | "International Maritime Dangerous Goods Code" for the transport of dangerous goods by sea |
| LC50 | Lethal Concentration to 50 % of a test population (Median Lethal Concentration) |
| LD50 | Lethal Dose to 50% of a test population (Median Lethal Dose) |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC/L | No Observed Adverse Effect Concentration/Level |
| NOEC/L | No Observed Effect Concentration/Level |
| OECD | Organisation for Economic Cooperation and Development |
| PBT | Persistent, Bioaccumulative and Toxic substance |
| PNEC | Predicted No-Effect Concentration |
| REACH | Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals |
| SDS | Safety Data Sheet |
| STP | Sewage Treatment Plant |
| UFI | Unique Formula Identifier |
| vPvB | Very Persistent and Very Bioaccumulative |
| | |

Full text of H- and EUH-phrases:

| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 | | |
|---------------|--|--|--|
| Met. Corr. 1 | Corrosive to metals, Category 1 | | |
| Skin Corr. 1A | Skin corrosion/irritation, Category 1, Sub-Category 1A | | |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 | | |
| H290 | May be corrosive to metals. | | |
| H314 | Causes severe skin burns and eye damage. | | |
| H315 | Causes skin irritation. | | |
| H319 | Causes serious eye irritation. | | |

SDS EU (REACH Annex II)

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.

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Standards and Controls BA E-1001, BA E-1002, BA E-1003, BA E-1004, BA E-1005, BA E-1006, BA E-1051 and BA E-1052

Safety Data Sheet

| | | according to Regulation (EU) 202 | 0/878 | |
|--|--|--|--|---------------------------------|
| | | Date of issue: 14.07.2023 | Revision date: - | Version/Replaced version: 1.0/- |
| SECT | ION 1: Identification of the su | bstance/mixture and of | the company/undertal | king |
| 1.1. | Product identifier | | | |
| Product | form | : Mixture | | |
| Produc | name | : Standards and Controls I BA E-1006, BA E-1051 a | 3A E-1001, BA E-1002, BA E-1 nd BA E-1052 | 1003, BA E-1004, BA E-1005, |
| UFI | | : - | | |
| 1.2. | Relevant identified uses of the sul | ostance or mixture and uses | advised against | |
| 1.2.1. | Relevant identified uses | | | |
| Use of | the substance/mixture | : Laboratory reagent, Imm | unoassays | |
| | | Use by professionals. | | |
| 1.2.2. | Uses advised against | | | |
| No add | itional information available | | | |
| 1.3. | Details of the supplier of the safet | y data sheet | | |
| LDN La Am Eic 48531 I T +49 (| er/Manufacturer bor Diagnostika Nord GmbH & Co. KG henhain 1 Nordhorn, Germany 0)5921 81970 - F +49 (0)5921 8197 20 @ldn.de | 1 | | |
| | Emergeney telephone nymber | | | |

1.4. Emergency telephone number

| Country | Organisation/Company | Address | Emergency telephone number |
|---------|--|--|--|
| Germany | LDN Labor Diagnostika Nord GmbH & Co. KG | Am Eichenhain 1 48531 Nordhorn, Germany | +49 (0) 5921-81970 (Mo-Fr 8:00-16:00) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] H290

Corrosive to metals, Category 1

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

May be corrosive to metals. Causes severe skin burns and eye damage.

2.2. Label elements

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



Signal word (CLP) Hazard statements (CLP) Precautionary statements (CLP)

: Warning

: H290 - May be corrosive to metals.

: P234 - Keep only in original packaging.

P390 - Absorb spillage to prevent material damage.

P406 - Store in a corrosion resistant container with a resistant inner liner.

Reduced labelling (contents of the package ≤ 125 ml) according to Regulation (EC) No. 1272/2008 [CLP]

| Hazard pictograms (CLP) | : | - |
|-------------------------|---|---|
| Signal word (CLP) | : | - |

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| Hazard statements (CLP) | : | - |
|--------------------------------|---|---|
| Precautionary statements (CLP) | : | - |

2.3. Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

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] |
|-----------------------|---|---|--|
| hydrochloric acid … % | (EC-No) 231-595-7 (EC Index-No) 017-002-01-X | < 1 | Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 |
| Name | Product identifier | • | concentration limits according to on (EC) No. 1272/2008 [CLP] |
| hydrochloric acid % | (EC-No) 231-595-7 (EC Index-No) 017-002-01-X | (10 \leq C < 25) Skin Irrit. 2, H315 (10 \leq C < 25) Eye Irrit. 2, H319 (10 \leq C \leq 100) STOT SE 3, H335 (25 \leq C \leq 100) Skin Corr. 1B, H314 | |

Full text of H-statements: see section 16

| SECTION 4: First aid measures | | | |
|--|---|---|--|
| 4.1. Description of first aid measures | | | |
| First-aid measures general | | ell. If possible show him this sheet. Failing this, anything by mouth to an unconscious person. sition. | |
| First-aid measures after inhalation | : Remove victim to fresh air and keep at rest i | n a position comfortable for breathing. | |
| First-aid measures after skin contact | : Take off immediately all contaminated clothin | ng. Gently wash with plenty of soap and water. | |
| First-aid measures after eye contact | : IF IN EYES: Rinse cautiously with water for a and easy to do. Continue rinsing. Call a physical sectors in the sector of the | several minutes. Remove contact lenses, if present sician immediately. | |
| First-aid measures after ingestion | : Rinse mouth. Do NOT induce vomiting. Drin | k plenty of water as a precaution. | |
| 4.2. Most important symptoms and effe | cts, both acute and delayed | | |
| Symptoms/effects | : Not expected to present a significant hazard | under anticipated conditions of normal use. | |
| 4.3. Indication of any immediate medica | al attention and special treatment needed | | |
| Treat symptomatically. | - | | |
| SECTION 5: Firefighting measures | | | |
| 5.1. Extinguishing media | | | |
| Suitable extinguishing media | : Adapt extinguishing agents to the environme powder. Water spray. | ent. Carbon dioxide. Foam. Dry extinguishing | |
| Unsuitable extinguishing media | : Do not use a heavy water stream. | | |
| 5.2. Special hazards arising from the su | ibstance or mixture | | |
| Hazardous decomposition products in case of fire | : Toxic gases may be formed. Carbon dioxide | . Carbon monoxide. Hydrogen chloride. Chlorine. | |
| 5.3. Advice for firefighters | | | |
| Firefighting instructions | : Prevent firefighting water from entering the e exposed containers. | environment. Use water spray or fog for cooling | |
| Protection during firefighting | : Use a self-contained breathing apparatus an | d also a protective suit. | |
| SECTION 6: Accidental release mea | sures | | |
| 6.1. Personal precautions, protective equipment and emergency procedures | | | |
| General measures | : Ensure adequate air ventilation. Avoid conta vapours/spray. | ct with skin and eyes. Do not breathe | |
| 6.1.1. For non-emergency personnel | | | |
| Emergency procedures | : Evacuate unnecessary personnel. | | |
| 14.07.2023 | EN (English) | Standards and Controls BA E-1001, BA E-1002, BA E 1002, BA E 1004, BA E 1005, BA E 1006 | |

Safety Data Sheet

according to Regulation (EU) 2020/878

| accordin | g to 1 togalation (EO) 2020/01 0 | |
|----------------------|---|--|
| 6.1.2. | For emergency responders | |
| Protective equipment | | : Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection. |
| 6.2. | Environmental precautions | |
| Prevent | t entry to sewers and public waters. | |
| 6.3. | Methods and material for contain | ient and cleaning up |
| Method | s for cleaning up | : Absorb spillage to prevent material damage. Wipe up with absorbent material (for example cloth). Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Dispose of in accordance with relevant local regulations. |
| 6.4. | Reference to other sections | |
| Exposu | re controls and personal protection, se | e section 8. Concerning disposal elimination after cleaning, see section 13. |
| SECT | ION 7: Handling and storage | |
| 7.1. | Precautions for safe handling | |
| Precaut | tions for safe handling | : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapour/aerosol. |
| Hygiene | e measures | : Handle in accordance with good industrial hygiene and safety procedures. When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |
| 7.2. | Conditions for safe storage, inclu | ing any incompatibilities |
| | | |

| Storage conditions | : | Store in corrosive resistant container with a resistant inner liner. Store in original container. Keep container tightly closed. Store in a cool, well-ventilated place. Protect from direct sunlight. Keep out of frost. |
|-------------------------------|---|---|
| Prohibitions on mixed storage | : | Keep away from food, drink and animal feedingstuffs. |

Incompatible materials

: Metals.

moompatible materials

7.3. Specific end use(s)

Laboratory reagent, Immunoassays

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Hydrochloric acid | . % (EC 231-595-7) | |
|-------------------|--|--|
| EU | Local name | Hydrogen chloride |
| EU | IOELV TWA (mg/m ³) | 8 mg/m ³ |
| EU | IOELV TWA (ppm) | 5 ppm |
| EU | IOELV STEL (mg/m ³) | 15 mg/m ³ |
| EU | IOELV STEL (ppm) | 10 ppm |
| Austria | Local name | Chlorwasserstoff |
| Austria | MAK (OEL TWA) (mg/m ³) | 8 mg/m ³ |
| Austria | MAK (OEL TWA) (ppm) | 5 ppm |
| Austria | MAK (OEL STEL) (mg/m ³) | 15 mg/m ³ |
| Austria | MAK (OEL STEL) (ppm) | 10 ppm |
| Belgium | Local name | Hydrogène (chlorure d') # Waterstofchloride |
| Belgium | OEL TWA (mg/m ³) | 8 mg/m ³ |
| Belgium | OEL TWA (ppm) | 5 ppm |
| Belgium | OEL STEL (mg/m ³) | 15 mg/m ³ |
| Belgium | OEL STEL (ppm) | 10 ppm |
| Germany | TRGS 900 Local name | Hydrogenchlorid |
| Germany | TRGS 900 Occupational Exposure Limit Value (mg/m ³) | 3 mg/m ³ |
| Germany | TRGS 900 Occupational Exposure Limit Value (ppm) | 2 ppm |
| Germany | TRGS 900 Remark | 2(I), DFG, EU, Y |
| Luxembourg | Local name | Chlorure d'hydrogène |
| Luxembourg | OEL TWA (mg/m ³) | 8 mg/m ³ |
| Luxembourg | OEL TWA (ppm) | 5 ppm |
| Luxembourg | OEL STEL (mg/m ³) | 15 mg/m ³ |
| Luxembourg | OEL STEL (ppm) | 10 ppm |
| Switzerland | Local name | Acide chlorhydrique / Chlorwasserstoff [Salzsäure] |
| Switzerland | MAK (mg/m ³) | 3 mg/m ³ |

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| Hydrochloric acid | % (EC 231-595-7) | | | |
|---------------------------------------|---------------------------|----------------------|---------------------|--|
| Switzerland | MAK (ppm) | | 2 ppm | |
| Switzerland | KZGW (mg/m ³) | | 6 mg/m ³ | |
| Switzerland | KZGW (ppm) | | 4 ppm | |
| Switzerland | Notation | | SSC | |
| Hydrochloric acid | % (EC 231-595-7) | | | |
| DNEL/DMEL (Workers) | | | | |
| Acute - local effects, inhalation | | 15 mg/m ³ | | |
| Long-term - local effects, inhalation | | 8 mg/m³ | | |
| DNEL/DMEL (General population) | | | | |
| Acute - local effects, inhalation | | 15 mg/m³ | | |
| Long-term - local effects, inhalation | | 8 mg/m ³ | | |

8.2. Exposure controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation to minimize vapour concentrations.

Hand protection:

Wear suitable gloves (EN 374). Nitrile rubber, 0.35 mm. Butyl rubber, 0.5 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Wear safety glasses (EN 166).

Skin and body protection:

Wear suitable protective clothing.

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Breathing apparatus with filter type P2.

Environmental exposure controls:

Avoid release to the environment.

| Avoid release to the environment. | | | | | | | |
|--|---------------------|--|--|--|--|--|--|
| SECTION 9: Physical and chemical properties | | | | | | | |
| 9.1. Information on basic physical and chemical properties | | | | | | | |
| Physical state : Liquid | | | | | | | |
| Colour | : Colourless | | | | | | |
| Odour | : No data available | | | | | | |
| Melting point/freezing point | : No data available | | | | | | |
| Boiling point or initial boiling point and boiling range | : No data available | | | | | | |
| Flammability | : No data available | | | | | | |
| Lower and upper explosion limit | : No data available | | | | | | |
| Flash point | : No data available | | | | | | |
| Auto-ignition temperature | : No data available | | | | | | |
| Decomposition temperature | : No data available | | | | | | |
| рН | : 1.0 - 1.3 | | | | | | |
| Kinematic viscosity | : No data available | | | | | | |
| Solubility | : No data available | | | | | | |
| Partition coefficient n-octanol/water (log value) | : Not applicable | | | | | | |
| Vapour pressure | : No data available | | | | | | |
| Density and/or relative density | : No data available | | | | | | |
| Relative vapour density | : No data available | | | | | | |
| Particle size | : Not applicable | | | | | | |
| | | | | | | | |

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9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosive properties : No explosive properties

Oxidising properties

: No oxidising properties

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3. Possibility of hazardous reactions

May be corrosive to metals.

10.4. Conditions to avoid

High temperatures.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases. Strong acids. Metals.

10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature. In case of fire: Toxic gases may be formed. Carbon dioxide. Carbon monoxide. Hydrogen chloride. Chlorine.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

: Not classified Based on available data, the classification criteria are not met

| LC50 inhalation rat | 7051 mg/m³ 30 min |
|---|--|
| Skin corrosion/irritation | : Not classified |
| | Based on available data, the classification criteria are not met |
| Serious eye damage/irritation | : Not classified |
| | Based on available data, the classification criteria are not met |
| Respiratory or skin sensitisation | : Not classified |
| | Based on available data, the classification criteria are not met |
| Germ cell mutagenicity | : Not classified |
| | Based on available data, the classification criteria are not met |
| Carcinogenicity | : Not classified |
| | Based on available data, the classification criteria are not met |
| Reproductive toxicity | : Not classified |
| | Based on available data, the classification criteria are not met |
| Specific target organ toxicity (single exposure) | : Not classified |
| | Based on available data, the classification criteria are not met |
| Specific target organ toxicity (repeated exposure) | : Not classified |
| | Based on available data, the classification criteria are not met |
| Aspiration hazard | : Not classified |
| | Based on available data, the classification criteria are not met |
| 11.2. Information on other hazards | |
| Potential adverse human health effects and symptoms | : Based on available data, the classification criteria are not met |
| SECTION 12: Ecological information | |
| 12.1. Toxicity | |

Acute aquatic toxicity

: Not classified

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| Hydrochloric acid % (EC 231-595-7) | | |
|---|--|--|
| LC50 fish | pH 3.25 – 3.5 96 h, Lepomis macrochirus | |
| EC50 crustacea | pH 4.92 48 h, Daphnia magna | |
| EC50 algae | pH 4.7 72 h, Chlorella vulgaris | |
| | | |
| 12.2. Persistence and degradability No additional information available | | |
| 12.3. Bioaccumulative potential | | |
| No additional information available | | |
| 12.4. Mobility in soil | | |
| No additional information available | | |
| 12.5. Results of PBT and vPvB assessm | lent | |
| Not fulfilling Persistent, Bioaccumulative and To | oxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. | |
| 12.6. Endocrine disrupting properties | | |
| No additional information available | | |
| 12.7. Other adverse effects | | |
| No additional information available | | |
| SECTION 13: Disposal consideration | ons | |
| 13.1. Waste treatment methods | | |
| Regional legislation (waste) | : Dispose in a safe manner in accordance with local/national regulations. | |
| Waste treatment methods | : Do not empty into drains. Dispose of this material and its container in a safe way. | |
| Waste code | : The waste code number according to the Ordinance on the European Waste Catalogue | |
| | depends on the waste producer and can therefore vary for any given product. The waste code number is therefore to be gleaned separately from each waste producer. | |
| SECTION 14: Transport information | 1 | |
| In accordance with ADR / IMDG / IATA | | |
| 14.1. UN number or ID number | | |
| UN-No. (ADR) | : Not applicable | |
| UN-No. (IMDG) | : Not applicable | |
| LINI No. (IATA) | | |
| UN-No. (IATA) | : Not applicable | |
| 14.2. UN proper shipping name | | |
| | | |
| 14.2. UN proper shipping name | : Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) | : Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) | Not applicable Not applicable Not applicable | |
| 14.2.UN proper shipping nameProper Shipping Name (ADR)Proper Shipping Name (IMDG)Proper Shipping Name (IATA) | Not applicable Not applicable Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) | Not applicable Not applicable Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) | Not applicable Not applicable Not applicable Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG | Not applicable Not applicable Not applicable Not applicable Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) | Not applicable Not applicable Not applicable Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG | Not applicable Not applicable Not applicable Not applicable Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG Transport hazard class(es) (IMDG) | Not applicable Not applicable Not applicable Not applicable Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG Transport hazard class(es) (IMDG) IATA | Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG Transport hazard class(es) (IMDG) IATA Transport hazard class(es) (IATA) | Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG Transport hazard class(es) (IMDG) IATA Transport hazard class(es) (IATA) 14.4. Packing group | Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG Transport hazard class(es) (IMDG) IATA Transport hazard class(es) (IATA) 14.4. Packing group Packing group (ADR) | Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG Transport hazard class(es) (IMDG) IATA Transport hazard class(es) (IATA) 14.4. Packing group Packing group (ADR) Packing group (IMDG) | Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG Transport hazard class(es) (IMDG) IATA Transport hazard class(es) (IATA) 14.4. Packing group Packing group (ADR) Packing group (IMDG) Packing group (IATA) 14.5. Environmental hazards | Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG Transport hazard class(es) (IMDG) IATA Transport hazard class(es) (IATA) 14.4. Packing group Packing group (ADR) Packing group (IMDG) Packing group (IATA) | Not applicable | |
| 14.2. UN proper shipping name Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) 14.3. Transport hazard class(es) ADR Transport hazard class(es) (ADR) IMDG Transport hazard class(es) (IMDG) IATA Transport hazard class(es) (IATA) 14.4. Packing group Packing group (IADR) Packing group (IMDG) Packing group (IATA) 14.5. Environmental hazards Dangerous for the environment | Not applicable | |

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14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

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 substance on the REACH candidate list Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

| Water hazard class (WGK) | : WGK 1 - Slightly hazardous to water |
|--------------------------|---|
| WGK Remark | : Classification according to AwSV, Annex 1 |
| Storage class (LGK) | : LGK 10 - 13 |
| Employment restrictions | : Employment prohibitions for the protection of young people at work according to § 22 section 1(6) JArbSchG have to be observed. |

mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and

·

Regulation (EC) No 1907/2006.

Changes compared to the previous version

Abbreviations and acronyms:

| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
|---------|---|
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures |
| DMEL | Derived Minimal Effect Level |
| DNEL | Derived No-Effect Level |
| EC50 | The effective concentration of substance that causes 50% of the maximum response (Median Effective Concentration) |
| IATA | International Air Transport Association |
| IMDG | "International Maritime Dangerous Goods Code" for the transport of dangerous goods by sea |
| LC50 | Lethal Concentration to 50 % of a test population (Median Lethal Concentration) |
| LD50 | Lethal Dose to 50% of a test population (Median Lethal Dose) |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC/L | No Observed Adverse Effect Concentration/Level |
| NOEC/L | No Observed Effect Concentration/Level |
| OECD | Organisation for Economic Cooperation and Development |
| PBT | Persistent, Bioaccumulative and Toxic substance |
| PNEC | Predicted No-Effect Concentration |
| REACH | Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals |
| SDS | Safety Data Sheet |
| STP | Sewage Treatment Plant |
| UFI | Unique Formula Identifier |

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vPvB Very Persistent and Very Bioaccumulative Full text of H- and EUH-phrases: Eye Dam. 1 Serious eye damage/eye irritation, Category 1 Eye Irrit. 2 Serious eye damage/eye irritation, Category 2

| Met. Corr. 1 | Corrosive to metals, Category 1 |
|---------------|--|
| Skin Corr. 1B | Skin corrosion/irritation, Category 1, Sub-Category 1B |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT SE 3 | Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation |
| H290 | May be corrosive to metals. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

SDS EU (REACH Annex II)

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.