

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Date of issue: 12-3-2019 Version: 1.0

| SECTION 1: Ide | entification of the substa | ance/mixture and of the | company/undertaking | | |
|-----------------------|--|--|---|----------|--|
| 1.1. Product ider | | | | | |
| Product form | | | : Mixture | | |
| Product name | | : Millennium HSW-200 EU | | | |
| 1.2. Relevant ide | entified uses of the substar | nce or mixture and uses adv | vised against | | |
| 1.2.1. Relevant ide | ntified uses | | | | |
| Main use category | | : Industrial use, Professional us | se | | |
| 1.2.2. Uses advise | d against | | | | |
| No additional inform | - | | | | |
| | e supplier of the safety dat | a sheet | | | |
| Tower Products Eur | • | | | | |
| Rendementsweg 20 | | | | | |
| 3641 SL Mijdrecht - | Nederland | | | | |
| T +31 297 289 691 | telenhone number | | | | |
| Emergency number | telephone number | +1-800-424-9300 (CHEMTREC |) | | |
| U | | | / | Comment | |
| Country | Organisation/Company | Address | Emergency number | Comment | |
| United Kingdom | Guy's & St Thomas' Poisons Unit | Avonley Road SE14 5ER London | +44 20 7188 7188 | | |
| | Medical Toxicology Unit, | SE 14 SER LONGON | | | |
| | Guy's & St Thomas' Hospital | | | | |
| | Trust | | | | |
| | | | | | |
| | azards identification on of the substance or mixt | | | | |
| | | | | | |
| Classification acco | ording to Regulation (EC) No. | 1272/2008 [CLP] | | | |
| Serious eve damag | e/eye irritation, Category 2 | H319 | | | |
| | ients : see section 16 | | | | |
| | | | | | |
| Causes serious eye | hemical, human health and en | vironmental effects | | | |
| 2.2. Label eleme | | | | | |
| | | (0000 IOL D) | | | |
| Hazard pictograms | ig to Regulation (EC) No. 1272 | /2008 [CLP] | | | |
| nazaru piciograms | (CEF) | | | | |
| | | | | | |
| | | • | | | |
| | | × | | | |
| GHS07 | | | | | |
| Signal word (CLP) | | : Warning | imitation | | |
| Hazard statements | | : H319 - Causes serious eye | irritation. ns and face thoroughly after har | dling | |
| Precautionary state | ments (CLF) | P280 - Wear protective cloth P305+P351+P338 - IF IN E | ning, eye protection, face protection YES: Rinse cautiously with wate and easy to do. Continue rinsing. | tion. | |
| | | | persists: Get medical advice/at | tention. | |
| 2.3. Other hazard | | | | | |
| No additional inform | nation available | | | | |

No additional information available

SECTION 3: Composition/information on ingredients 3.1. Substances

Not applicable

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|--|--|--|
| Sodium xylenesulphonate | (CAS-No.) 1300-72-7 (EC-No.) 215-090-9 (REACH-no) 01-2119513350-56 | < 10 | Eye Irrit. 2, H319 |
| 2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve | (CAS-No.) 111-76-2 (EC-No.) 203-905-0 (EC Index-No.) 603-014-00-0 (REACH-no) 01-2119475108-36 | < 5 | Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315 |
| SODIUM NITRATE | (CAS-No.) 7631-99-4 (EC-No.) 231-554-3 | < 5 | Ox. Sol. 2, H272 Eye Irrit. 2, H319 |
| Acetic acid | (CAS-No.) 64-19-7 (EC-No.) 200-580-7 (EC Index-No.) 607-002-00-6 (REACH-no) 01-2119475328-30 | < 5 | Flam. Liq. 3, H226 Skin Corr. 1A, H314 |
| Specific concentration limits: | | | |
| Name | Product identifier | Specific concentration limits | |
| Acetic acid | (CAS-No.) 64-19-7 (EC-No.) 200-580-7 (EC Index-No.) 607-002-00-6 (REACH-no) 01-2119475328-30 | (10 = <c 100)="" 2,="" <="" h315<br="" irrit.="" skin="">(10 =<c 100)="" 2,="" <="" eye="" h319<br="" irrit.="">(25 =<c 100)="" 1b,="" <="" corr.="" h314<br="" skin="">(90 =<c 100)="" 1a,="" <="" corr.="" h314<="" skin="" td=""></c></c></c></c> | |

Full text of H-statements: see section 16

| SECTION 4: First aid measures | |
|--|---|
| 4.1. Description of first aid measures | |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. |
| First-aid measures after skin contact | : Wash skin with plenty of water. |
| First-aid measures after eye contact | : Rinse eyes with water as a precaution. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion | : Call a poison center or a doctor if you feel unwell. |
| 4.2. Most important symptoms and effects, b | |
| Symptoms/effects after eye contact | : Eye irritation. |
| 4.3. Indication of any immediate medical atte Treat symptomatically. | ention and special treatment needed |
| SECTION 5: Firefighting measures | |
| 5.1. Extinguishing media | |
| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. |
| 5.2. Special hazards arising from the substa | nce or mixture |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |
| 5.3. Advice for firefighters | |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
| SECTION 6: Accidental release measure | es a la companya de l |
| 6.1. Personal precautions, protective equipn | nent and emergency procedures |
| 6.1.1. For non-emergency personnel | |
| Emergency procedures | : Ventilate spillage area. Avoid contact with skin and eyes. |
| 6.1.2. For emergency responders | |
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| 6.2. Environmental precautions | |
| Avoid release to the environment. | |
| 6.3. Methods and material for containment a | |
| Methods for cleaning up | : Take up liquid spill into absorbent material. |
| Other information | : Dispose of materials or solid residues at an authorized site. |
| | |

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

6.4. Reference to other sections

For further information refer to section 13.

| SECTION 7: Handling and storage | |
|--|---|
| 7.1. Precautions for safe handling | |
| Precautions for safe handling | : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |
| 7.2. Conditions for safe storage, includin | g any incompatibilities |
| Storage conditions | : Store in a well-ventilated place. Keep cool. |
| 7.3. Specific end use(s) | |
| No additional information available | |

| SECTION 8: Exposure c 8.1. Control parameters Acetic acid (64-19-7) | ontrols/personal protection | | |
|---|---|----------|--|
| EU | IOELV TWA (mg/m³) | 25 mg/m³ | |
| EU | IOELV STEL (mg/m³) | 50 mg/m³ | |
| Germany | TRGS 910 Acceptable concentration notes | | |
| 8.2 Exposure controls | | | |

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

| Materials for protect | ctive clothing: | | | | | | |
|------------------------|------------------|--------------------|-----------------------|----------------|-----------|----|--------------------|
| Condition | | Material | | Standard | Standard | | |
| Good resistance: | | Synthetic material | | EN 13034 | EN 13034 | | |
| Hand protection: | | | | | | | |
| Protective gloves | | | | | | | |
| Туре | Material | | Permeation | Thickness (mm) | Penetrati | on | Standard |
| Reusable gloves | Nitrile rubb | er (NBR) | 6 (> 480 minutes) | >0.31mm | | | EN ISO 374, EN 388 |
| Eye protection: | | | | | | | |
| Safety glasses | | | | | | | |
| Type Use | | | Characteristics | | Standard | | |
| Safety glasses Droplet | | | With side shields | | EN 166 | | |
| Skin and body prot | ection: | | | | | | |
| Wear suitable protect | ctive clothing | | | | | | |
| Respiratory protect | tion: | | | | | | |
| In case of insufficien | t ventilation we | ar suitable i | respiratory equipment | | | | |

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

| SECTION 9: Physical and | chemical properties | |
|--------------------------------|--------------------------------|--|
| 9.1. Information on basic ph | ysical and chemical properties | |
| Physical state | : Liquid | |
| Colour | : dark blue. | |
| Odour | : characteristic. | |
| | | |

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

| Odour threshold | : No data available |
|--|---------------------|
| рН | : 3,8 |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : Not applicable |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : > 100 °C |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Not applicable |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Density | : 1,12 g/ml |
| Solubility | : No data available |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |
| 9.2. Other information | |

9.2. Other information No additional information available

| SECTION 10: Stability and reactivity |
|--|
| 10.1. Reactivity |
| The product is non-reactive under normal conditions of use, storage and transport. |
| 10.2. Chemical stability |
| Stable under normal conditions. |
| 10.3. Possibility of hazardous reactions |
| No dangerous reactions known under normal conditions of use. |
| 10.4. Conditions to avoid |
| None under recommended storage and handling conditions (see section 7). |
| 10.5. Incompatible materials |
| No additional information available |
| 10.6. Hazardous decomposition products |
| Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

| SECTION 11: Toxicological information | | | | |
|--|-----------------------|--|--|--|
| 11.1. Information on toxicological effects | | | | |
| Acute toxicity (oral) : | Not classified | | | |
| Acute toxicity (dermal) : | Not classified | | | |
| Acute toxicity (inhalation) : | Not classified | | | |
| Acetic acid (64-19-7) | | | | |
| LD50 oral | 3310 mg/kg bodyweight | | | |
| LD50 dermal | 1060 mg/kg bodyweight | | | |

| SODIUM NITRATE (7631-99-4) | |
|----------------------------|------------|
| LD50 oral rat | 1267 mg/kg |

| Sodium xylenesulphonate (1300-72- |) |
|--|----------------------------------|
| LD50 oral | > 7000 mg/kg bodyweight |
| LD50 dermal | > 2000 mg/kg bodyweight |
| Skin corrosion/irritation : Not classified | |
| | рН: 3,8 |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| | рН: 3,8 |

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

| Respiratory or skin sensitisation | : Not classified |
|-----------------------------------|------------------|
| 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 |
| | |

| SECTION 12: Ecological information | |
|------------------------------------|--|
| 12.1. Toxicity | |
| Ecology - general | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
| Acute aquatic toxicity | : Not classified |
| Chronic aquatic toxicity | : Not classified |
| Acetic acid (64-19-7) | |
| LC50 fish 1 | > 1000 mg/l |
| EC50 other aquatic organisms 1 | > 1000 mg/l |
| EC50 other aquatic organisms 2 | IC50 algea (72 h) mg/l |

| SODIUM NITRATE (7631-99-4) | |
|----------------------------|---|
| LC50 fish 1 | 2000 mg/l (Lepomis macrochirus) |
| LC50 fish 2 | 994,4 - 1107 mg/l (Oncorhynchus mykiss) |

| Sodium xylenesulphonate (1300-72-7) | |
|--|------------------------|
| EC50 other aquatic organisms 1 | > 1020 mg/l |
| EC50 other aquatic organisms 2 | IC50 algea (72 h) mg/l |
| 12.2. Persistence and degradability No additional information available | |
| 12.3. Bioaccumulative potential | |
| Acetic acid (64-19-7) | |
| Log Pow | -0,17 |
| 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 No additional information available | |

| SECTION 13: Disposal considerations | |
|-------------------------------------|---|
| 13.1. Waste treatment methods | |
| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |

| SECTION 14: Transport informatio | n | |
|--|--|------|
| In accordance with ADR / RID / IMDG / IATA | / ADN | |
| 14.1. UN number | | |
| UN-No. (ADR) | : Not applicable | |
| 14.2. UN proper shipping name | | |
| Proper Shipping Name (ADR) | : Not applicable | |
| 14.3. Transport hazard class(es) | | |
| ADR | | |
| Transport hazard class(es) (ADR) | : Not applicable | |
| 14.4. Packing group | | |
| Packing group (ADR) | : Not applicable | |
| 14.5. Environmental hazards | | |
| Dangerous for the environment | : No | |
| Other information | : No supplementary information available | |
| 12.2.2010 () (orging: 1.0) | EN (English) | E /7 |

Safetv Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

14.6. Special precautions for user

Overland transport

Not applicable

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

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment No chemical safety assessment has been carried out

no chemical salety assessment has been carried

SECTION 16: Other information Abbreviations and acronyms: ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways European Agreement concerning the International Carriage of Dangerous Goods by Road ADR CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 IARC International Agency for Research on Cancer ΙΑΤΑ International Air Transport Association REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet vPvB Very Persistent and Very Bioaccumulative

| Full text of H- and EUH-statements: | |
|-------------------------------------|---|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 |
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Flam. Liq. 3 | Flammable liquids, Category 3 |
| Ox. Sol. 2 | Oxidising Solids, Category 2 |
| Skin Corr. 1A | Skin corrosion/irritation, Category 1A |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1B |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| H226 | Flammable liquid and vapour. |
| H272 | May intensify fire; oxidiser. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

| H319 | Causes serious eye irritation. |
|------|--------------------------------|
| H332 | Harmful if inhaled. |

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