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

· 1.1 Product identifier

. Trade name: Kalklöser ökosafe

- · 1.2 Relevant identified uses of the substance or mixture and uses advised against -
- · Application of the substance / the mixture Deliming agent
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

BWT Aktiengesellschaft

Walter Simmer Straße 4

A - 5310 Mondsee

AUSTRIA

Tel.: +43/6232/5011-0 Fax: +43/6232/4050 email: office@bwt.at

· Further information obtainable from:

Abteilung F&E - Chemikalienbeauftragter

Tel.: +43/6232/5011-1427 email: msds-info@bwt-group.com

· 1.4 Emergency telephone number:

Vergiftungsinformation Wien Tel.: +43/1-406 43 43

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

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

· Hazard pictograms



GHS05

P310

- · Signal word Danger
- · Hazard-determining components of labelling:

methanesulphonic acid

· Hazard statements

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

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- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

| · Dangerous components: | | | | |
|--------------------------------------|--------------------------------|--|--------|--|
| CAS: 75-75-2 EINECS: 200-898-6 | methanesulphonic acid | 📀 Skin Corr. 1B, H314 | 25-50% | |
| CAS: 77-92-9 EINECS: 201-069-1 | citric acid | 🗘 Eye Irrit. 2, H319 | 10-25% | |
| CAS: 107-21-1 EINECS: 203-473-3 | ethanediol | 1 Acute Tox. 4, H302 | ≤2.5% | |
| CAS: 68424-85-1 EINECS: 270-325-2 | Quaternary ammonium compounds. | Skin Corr. 1B, H314 Aquatic Acute 1, H400 Acute Tox. 4, H302 | ≤2.5% | |

[·] Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Cover wound with a sterile dressing.

Seek medical treatment.

- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

Water

Foam

· 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

 \cdot 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

• 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

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· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.
- · Storage class: 8B
- \cdot 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

107-21-1 ethanediol

WEL Short-term value: 104** mg/m³, 40** ppm Long-term value: 10* 52** mg/m³, 20** ppm

Sk *particulate **vapour

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Respiratory protection:

Use suitable respiratory protective device only when aerosol or mist is formed.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Filter A/P2

· Protection of hands:



Protective gloves

· Material of gloves Butyl rubber, BR

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Nitrile rubber, NBR

· Penetration time of glove material

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

· Eye protection:



Tightly sealed goggles

 $\cdot \textit{Body protection:} \ A cid\ resistant\ protective\ clothing$

| 9.1 Information on basic physical and ch | nemical properties |
|--|---|
| General Information | |
| Appearance: | Fl.: 1 |
| Form: Colour: | Fluid Light brown |
| Odour: | Odourless |
| Odour threshold: | Not determined. |
| pH-value at 20 °C: | <1 |
| Change in condition | |
| Melting point/freezing point: | Undetermined. |
| Initial boiling point and boiling range: | |
| Flash point: | >93 °C |
| Flammability (solid, gas): | Not applicable. |
| Decomposition temperature: | Not determined. |
| Auto-ignition temperature: | Product is not selfigniting. |
| Explosive properties: | Product does not present an explosion hazard. |
| Explosion limits: | |
| Lower: | Not determined. |
| Upper: | Not determined. |
| Vapour pressure at 20 °C: | 23 hPa |
| Density at 20 °C: | 1.23 g/cm³ |
| Relative density | Not determined. |
| Vapour density | Not determined. |
| Evaporation rate | Not determined. |
| Solubility in / Miscibility with | |
| water: | Fully miscible. |
| Partition coefficient: n-octanol/water: | Not determined. |
| Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| Solvent content: | |
| Water: | 35.3 % |
| VOC (EC) | 0.00 % |

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· 9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- · 10.3 Possibility of hazardous reactions Violent reaction with concentrated alkali and oxidising agents.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: Bases
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation

Causes severe skin burns and eye damage.

· Serious eye damage/irritation

Causes serious eye damage.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

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SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must be specially treated adhering to official regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

06 01 06* other acids

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

| SECTION 14: Transport informa | |
|---|---|
| 14.1 UN-Number ADR, IMDG, IATA | UN3265 |
| 14.2 UN proper shipping name ADR | 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O. (methanesulphonic acid, Quaternary ammoniu compounds.) |
| IMDG, IATA | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O. (methanesulphonic acid, Quaternary ammoniu compounds.) |
| 14.3 Transport hazard class(es) | |
| ADR, IMDG, IATA | |
| | |
| Class Label | 8 Corrosive substances. 8 |
| | 0 |
| 14.4 Packing group ADR, IMDG, IATA | III |
| 14.5 Environmental hazards: | Not applicable. |
| 14.6 Special precautions for user | Warning: Corrosive substances. |
| Danger code (Kemler): | 80 |
| EMS Number: | F-A,S-B |
| Segregation groups | Acids A |
| Stowage Category Stowage Code | A SW2 Clear of living quarters. |
| 14.7 Transport in bulk according to Ann | 7 - 7 - |
| Marpol and the IBC Code | Not applicable. |
| Transport/Additional information: | |
| ADR | |
| Limited quantities (LQ) | 5L |
| Excepted quantities (EQ) | Code: E1 |
| | Maximum net quantity per inner packaging: 30 ml |
| Transport eategory | Maximum net quantity per outer packaging: 1000 ml |
| Transport category | J |

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|---|---|
| · Tunnel restriction code | E |
| · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) | 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml |
| · UN ''Model Regulation'': | UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (METHANESULPHONIC ACID, QUATERNARY AMMONIUM COMPOUNDS.), 8, III |

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

· * Data compared to the previous version altered.

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