acc. to 1907/2006/EC, Article 31 (REACH), 1272/2008/EC (CLP)

Printing date 07.11.2017 Version number 2 Revision: 07.11.2017

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

. 1.1 Product identifier

. Trade name KAIPOW

Article number: 12425D

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

No further relevant information available.

- . Application of the substance / the mixture Cleaning material/ Detergent
- . 1.3 Details of the supplier of the safety data sheet
- . Manufacturer/Supplier:

Kaivac EMEA GmbH

Sommerfeld 1

5202 Neumarkt a.W.

Österreich

Tel. 0043 6216 4524 15

office@kaivac-emea.com

www.kaivac-emea.com

- . Information: Martin Baumgartner
- 1.4 Emergency telephone number:

Tel. 0043 6216 4524 15 (Nur zu Büroöffnungszeiten: Montag bis Donnerstag von 08:00 bis 17:00 Uhr, Freitag: 08:00 bis 12:00)

SECTION 2: Hazards identification

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

Met. Corr.1 H290 May be corrosive to metals.

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



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

potassium hydroxide

. Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

. Precautionary statements

P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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.

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P310 Immediately call a POISON CENTER/doctor.

SECTION 3: Composition/information on ingredients

. 3.2 Chemical characterisation: Mixtures

. **Description:** Mixture of the substances listed below with harmless additions.

. Dangerous components:

CAS: 112-34-5 2-(2-butoxyethoxy)ethanol 5-<10%

EINECS: 203-961-6 Eye Irrit. 2, H319

Index number: 603-096-00-8 Reg.nr.: 01-2119475104-44-xxxx

CAS: 1312-76-1 Silicic acid, potassium salt ≥1-<2.5%

EINECS: 215-199-1 Skin Corr. 1B, H314; STOT SE 3, H335

CAS: 1310-58-3 potassium hydroxide ≥0.5-≤2%

EINECS: 215-181-3 Skin Corr. 1A, H314; Acute Tox. 4, H302

Index number: 019-002-00-8 Reg.nr.: 01-2119487136-33-xxxx

quaternary ammonium compounds ≥0.1-≤0.25%

Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H302; Skin Irrit.

2, H315

. SVHC No

. Regulation (EC) No 648/2004 on detergents / Labelling for contents

phosphates <5%

perfumes ((R)-p-mentha-1,8-diene)

. 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 Instantly remove any clothing soiled by the product.
- . After inhalation: Supply fresh air; consult doctor in case of symptoms.
- . After skin contact :

Immediately wash with soap and water and rinse thoroughly.

Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

. After eye contact :

Rinse opened eye for 15 minutes under running water.

Call a doctor immediately.

- . After swallowing: Drink copious amounts of water (app. 500 ml) and provide fresh air. Instantly call for doctor.
- . 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and / or in section 11. Further important symptoms and effects are so far not known.

- . Danger Danger of gastric perforation.
- . 4.3 Indication of any immediate medical attention and special treatment needed If swallowed, gastric irrigation

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- . Suitable extinguishing agents

Use fire fighting measures that suit the environment.

CO2, extinguishing powder or water jet. Fight larger fires with foam.

- . For safety reasons unsuitable extinguishing agents Water with a full water jet.
- . **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

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acc. to 1907/2006/EC, Article 31 (REACH), 1272/2008/EC (CLP)

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- . 5.3 Advice for firefighters
- . Protective equipment: Wear alkaline resistant protective clothing.
- . Additional information Collect contaminated fire fighting water separately. It must not enter drains.

SECTION 6: Accidental release measures

. 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

- . 6.2 Environmental precautions: Do not allow concentrated solutions to enter drainage system, surface or ground water.
- 6.3 Methods and material for containment and cleaning up:

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

Use neutralising agent.

Dispose of contaminated material as waste according to section 13.

6.4 Reference to other sections

See section 7 for information on safe handling

See section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

- . 7.1 Precautions for safe handling Open and handle container with care.
- . Information about protection against explosions and fires: No special measures required.
- . 7.2 Conditions for safe storage, including any incompatibilities
- . Storage
- Requirements to be met by storerooms and containers:

Provide alkali-resistant floor.

Do not use light alloy containers.

- . **Information about storage in one common storage facility:** Do not store together with acids.
- Further information about storage conditions:

Store in cool, dry conditions in well sealed containers.

Protect from heat and direct sunlight.

Protect from frost.

. 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- . Additional information about design of technical systems: No further data; see section 7.
- . 8.1 Control parameters
- . Components with critical values that require monitoring at the workplace:

112-34-5 2-(2-butoxyethoxy)ethanol

WEL (Great Britain) Short-term value: 101.2 mg/m³, 15 ppm

Long-term value: 67.5 mg/m³, 10 ppm

IOELV (European Union) Short-term value: 101.2 mg/m³, 15 ppm

Long-term value: 67.5 mg/m³, 10 ppm

1310-58-3 potassium hydroxide

WEL (Great Britain) Short-term value: 2 mg/m³

- . Additional information: The lists that were valid during compilation were used as a basis.
- . 8.2 Exposure controls
- . Personal protective equipment
- . General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.

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Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

- . Breathing equipment: Use breathing protection in case of insufficient ventilation.
- Protection of hands:

Protective gloves:

In case of spray contact at least protection index 2 recommended, according to more than 30 min. penetration time (EN 374).

Layer thickness of gloves at least: 0.4 mm

In case of prolonged and intensive contact protection index 6 recommended, according to more than 480 min. penetration time (EN 374).

Layer thickness of gloves at least: 0.7 mm

. Material of gloves

Butyl rubber, BR

Nitrile rubber, NBR

Natural rubber, NR

Neoprene gloves

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 safety glasses (DIN 58211, EN 166)
- . Body protection: Alkaline resistant protective clothing

SECTION 9: Physical and chemical properties

- . 9.1 Information on basic physical and chemical properties
- . General Information

. Appearance:

Form: Fluid
Colour: Yellow

. Smell: Characteristic

. Odour threshold: not determined

. pH-value at 20 °C: ca. 13 (100%)

. Change in condition

Melting point/freezing point: not determined Initial boiling point and boiling range: not determined

Flash point: Not applicable

. **Inflammability (solid, gaseous)** Product is not inflammable.

Ignition temperature: not applicable
 Decomposition temperature: not determined

. **Explosive properties:** Product is not explosive.

. Critical values for explosion:

Lower: not applicable

. Oxidising properties none

. Steam pressure: not applicable
. Density at 20 °C ca. 1,05 g/cm³

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acc. to 1907/2006/EC, Article 31 (REACH), 1272/2008/EC (CLP)

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. **Evaporation rate** not determined

. Solubility in / Miscibility with

Water: Soluble

. Partition coefficient: n-octanol/water: not determined

. Viscosity:

dynamic: not determined

. **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- . 10.1 Reactivity No hazardous reactions when stored and handled according to instructions.
- 10.2 Chemical stability
- . Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions

Strong exothermic reaction with acids

Corrosive action on metals

- . 10.4 Conditions to avoid No further relevant information available.
- . 10.5 Incompatible materials:

Acids

Oxidizers

Aluminium and light alloys.

. 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.
- . LD/LC50 values that are relevant for classification:

1310-58-3 potassium hydroxide

Oral LD50 333 mg/kg (rat)

. Components Type Value Species

As the product is classified as corrosive, testing on acute toxicity is forbidden due to animal welfare regulations.

- . 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.
- . Additional toxicological information: Causes serious eye damage.
- . Sensitisation No sensitizing effect known.
- . Repeated dose toxicity No further relevant information available.
- . CMR effects (carcinogenity, mutagenicity and toxicity for reproduction) No further relevant information available.
- . 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.

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SECTION 12: Ecological information

- . 12.1 Toxicity
- Aquatic toxicity:

1310-58-3 potassium hydroxide

LC50 (96 h) 80 mg/L (Gambusia affinis)

- . 12.2 Persistence and degradability No further relevant information available.
- . Other information: Easy elimination possible by flocculation or adsorption by sludge.
- . 12.3 Bioaccumulative potential No further relevant information available.
- . 12.4 Mobility in soil No further relevant information available.
- . Additional ecological information:
- . General notes:

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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

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

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- . Recommendation

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

Must be specially treated in adherence to official regulations.

. European waste catalogue

20 01 29* detergents containing hazardous substances

- . Uncleaned packaging:
- . Recommendation:

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

Dispose of packaging according to regulations on the disposal of packagings.

. Recommended cleaning agent: Water, if necessary with cleaning agent.

SECTION 14: Transport information

. 14.1 UN-Number

. ADR, IMDG, IATA

UN1719

. 14.2 UN proper shipping name . ADR

1719 CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM

HYDROXIDE)

. IMDG, IATA CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM

HYDROXIDE)

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. 14.3 Transport hazard class(es)

. ADR



. Class 8 (C5) Corrosive substances.

. Label

. IMDG, IATA



8 Corrosive substances. . Class

. Label 8

. 14.4 Packing group

. ADR, IMDG, IATA

. 14.5 Environmental hazards: Not applicable.

. 14.6 Special precautions for user Warning: Corrosive substances.

Kemler Number: 80 . EMS Number: F-A,S-B . Segregation groups Alkalis

. Stowage Category Α

SG22 Stow "away from" ammonium salts . Segregation Code

SG35 Stow "separated from" acids.

. 14.7 Transport in bulk according to Annex II of Marpol

and the IBC Code Not applicable.

. Transport/Additional information: Frost protected transport has to be guaranteed.

. ADR

. Limited quantities (LQ) 5L . Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

. Transport category . Tunnel restriction code Ε

. IMDG

. Limited quantities (LQ) 1L

. Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

. UN "Model Regulation": UN 1719 CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM

HYDROXIDE), 8, III

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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, 55
- . National regulations
- . Information about limitation of use: Employment restrictions concerning young persons must be observed.
- . 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they 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.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

. Contact: .

. Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Met. Corr.1: Corrosive to metals - Category 1

Acute Tox. 4: Acute toxicity - Category 4

Skin Corr. 1A: Skin corrosion/irritation - Category 1A

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

Skin Irrit. 2: Skin corrosion/irritation - Category 2

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

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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

- . Sources: source ECHA: European Chemicals Agency, http://echa.europa.eu/
- . * Data compared to the previous version altered.

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