

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 20.08.2018

Version number 11

Revision: 20.08.2018

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

1.1 Product identifier

Trade name: Geschirrspülmittel K2

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

Product is for professional use only.

Dishwasher formulation

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Lieferant: Renosan Chemie & Technik GmbH

Bodenseestraße 29

81241 München, Deutschland

Tel.: +49 89 8905569-0

Fax: +49 89 8905569-19

E-Mail: info@renosan.de

Internet: www.renosan.de

Informing department:

Renosan GmbH, Tel.: +49 (0) 800 736 6720 (kostenfrei)

info@renosan.de

1.4 Emergency telephone number:

Berlin - Institut für Toxikologie - Klinische Toxikologie und Giftnotruf Berlin

Tel. (+49) 030 30686 700

E-Mail: mail@giftnotruf.de

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Met. Corr.1

H290 May be corrosive to metals.

Skin Corr. 1A

H314 Causes severe skin burns and eye damage.

Eye Dam. 1

H318 Causes serious eye damage.



GHS09 environment

Aquatic Acute 1

H400 Very toxic to aquatic life.

Aquatic Chronic 2

H411 Toxic to aquatic life with long lasting effects.

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

GHS09

Signal word Danger

Hazard-determining components of labelling:

sodium hydroxide

sodium hypochlorite, solution

Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

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

P273 Avoid release to the environment.

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

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

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

P314 Get medical advice/attention if you feel unwell.

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

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

Additional information:

EUH031 Contact with acids liberates toxic gas.

2.3 Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures**Dangerous components:**

CAS: 1310-73-2 EINECS: 215-185-5 Index number: 011-002-00-6 Reg.nr.: 01-2119457892-27	sodium hydroxide ⚠ Met. Corr.1, H290; Skin Corr. 1A, H314	5-15%
CAS: 7681-52-9 EINECS: 231-668-3 Index number: 017-011-00-1 Reg.nr.: 01-2119488154-34	sodium hypochlorite, solution ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ STOT SE 3, H335	1-5%

Classification in accordance with Directive 648/2004:

chlorine-based bleaching agents, phosphonates	<5%
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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

Instantly wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing

Rinse out mouth and then drink plenty of water.

Seek medical treatment.

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**

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

Use fire fighting measures that suit the environment.

5.2 Special hazards arising from the substance or mixture

In case of contact with acids liberation of chlorine is possible.

5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus.

Additional information

Cool endangered containers with water spray jet.

Product is not combustible.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.
In case of liberation of chlorine wear respiratory protection.

6.2 Environmental precautions:

Do not allow product to reach sewage systems or water bodies in great quantities.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of the material collected according to regulations.

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 information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Do not mix with other products, particularly not with acids.
Do not close container gas-tight. Containers of delivery have degassing valve.
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:

The official regulations for storage of chemicals hazardous to water must be observed.
Use only containers specifically permitted for this substance/product.

Information about storage in one common storage facility: Do not store together with acids.

Further information about storage conditions:

Store in a cool place.
Protect from heat and direct sunlight.

Storage class TRGS 510: LGK 8B

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace:

CAS: 1310-73-2 sodium hydroxide

WEL | Short-term value: 2 mg/m³

Additional information: The lists that were valid during the compilation were used as basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures should be adhered to general rules for handling chemicals.

Avoid contact with the eyes and skin.
Keep away from foodstuffs, beverages and food.
Take off immediately all contaminated clothing

Breathing equipment:

Use breathing protection in case of insufficient ventilation.
Multi-purpose filter A-B-E-K

Protection of hands: Chemical resistant protective gloves (EN 374).

Material of gloves

Butyl rubber
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.4 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

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.

Body protection: Wear suitable protective clothing.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	Yellowish
Odour:	chlorine-like
Odour threshold:	Not determined

pH-value (10 g/l) at 20 °C: >12.5

Change in condition

Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	>100 °C
Crystallisation temperature / range:	<-10 °C

Flash point: Not applicable

Ignition temperature: Not determined

Decomposition temperature: Not determined

Self-inflammability: Product is not selfigniting.

Critical values for explosion:

Oxidising properties no

Density at 20 °C 1.18 g/cm³

Solubility in / Miscibility with

Water:	Fully miscible
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:

Slow liberation of Oxygene in case of elevated temperatures.

10.3 Possibility of hazardous reactions

Contact with acids releases toxic gases

Reacts with light alloys to form hydrogen

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: Chlorine(with acid)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity Not determined

LD/LC50 values that are relevant for classification:

CAS: 1310-73-2 sodium hydroxide

Oral	LD50	2000 mg/kg (rat)
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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:

Chlorine released in result of contact with acids may cause severe damage of eyes and respiratory tract.

CMR effects (carcinogenicity, 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.

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Trade name: **Geschirrspülmittel K2****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:** 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:****COD-value:** <10 g O₂/kg product**AOX-indication:** Product halogenates and contributes to the AOX-value.**General notes:**

This product contains alkalis and Sodium hypochlorite. Before entering a sewer neutralisation and elimination of chlorine is necessary.

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 be specially treated with regard to official regulations.**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information****14.1 UN-Number****ADR, IMDG**

UN1719

14.2 UN proper shipping name**ADR**1719 ÄTZENDER ALKALISCHER FLÜSSIGER STOFF,
N.A.G. (NATRIUMHYDROXID, HYPOCHLORITLÖSUNG),
UMWELTGEFÄHRDEND**IMDG**CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE,
HYPOCHLORITE SOLUTION), MARINE POLLUTANT**14.3 Transport hazard class(es)****ADR****Class**

8 (C5)

Label

8

IMDG**Class**

8

Label

8

14.4 Packing group**ADR, IMDG**

II

14.5 Environmental hazards:**Marine pollutant:**

Symbol (fish and tree)

Special marking (ADR):

Symbol (fish and tree)

14.6 Special precautions for user**Kemler Number:**

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EMS Number:	F-A,S-B
Segregation groups	Alkalis
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
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
Transport category	2
Tunnel restriction code	E
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. (SODIUM HYDROXIDE, HYPOCHLORITE SOLUTION), 8, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



GHS05 GHS09

Signal word Danger

Hazard-determining components of labelling:

sodium hydroxide
sodium hypochlorite, solution

Hazard statements

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
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 [or 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.
P314 Get medical advice/attention if you feel unwell.
P406 Store in a corrosion resistant container / container with a resistant inner liner.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category E1 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

National regulations

Information about limitation of use:

Employment restrictions concerning young persons must be observed.

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Employment restrictions concerning pregnant and lactating women must be observed.
Employment restrictions concerning women of child-bearing age must be observed.

Decree to be applied in case of technical fault:

Störfallverordnung, Anhang II, Nr.: 67 Chlor Mengenschwelle A (1. StörfallVwV): 5330 kg Calgonit 6010

Water hazard class (Germany): Water hazard class 2 (Self-assessment): hazardous for water.**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

The above information is based on our present knowledge about the product. It does not guarantee specific product features.

Full text of R-phrases listed in chapters 2 and 3:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Department issuing data specification sheet: Manufacturer**Reference to modifications:**

Please take notice of the changes made in compare to the last version from 10 in the following sections: 1,2,15

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

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

vPvB: very Persistent and very Bioaccumulative

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

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

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

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

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

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

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Sources KC-228154m

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