

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.09.2019

Version Nr. 11

Revision: 16.09.2019

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

- **Creation date / First edition:** 15.02.2012
- **1.1 Product identifier**
- **Trade name** Two in One
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** 2-component cleaning agents for industrial use.
Only for commercial application in combi steamers with WaveClean®.
Please observe the notes in the operating instructions.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
MKN Maschinenfabrik Kurt Neubauer GmbH & Co.
Halberstädter Str. 2a
38300 Wolfenbüttel
Germany
Tel.: +49 (0) 5331 89 – 0
Fax: + 49 (0) 5331 89 280
www.mkn.eu
- **Informing department:**
Department of Occupational:
Tel.: +49 (0) 5331 89 - 0
email qualified Person MSDS: sdb@csb-online.de
- **1.4 Emergency telephone number:** (001) 352 323 3500

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 H 318 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

- **Signal word** Danger
- **Hazard-determining components of labelling:**
sodium hydroxide
- **Hazard statements**
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
P280 Wear protective gloves and eye protection.

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P310 Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353 IF ON SKIN (or hair): Remove/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.

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

- 2.3 Other hazards

- Results of PBT and vPvB assessment

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- 3.1 Substances

- **Identification number(s)** 7.127

- 3.2 Mixtures

- **Description:** 2 phases detergent (cartridge) with an alkaline and an acidic component.

- Dangerous components:

CAS: 1310-73-2 EINECS: 215-185-5	sodium hydroxide  Met. Corr.1, H290; Skin Corr. 1A, H314	50-100%
CAS: 77-92-9 EINECS: 201-069-1	citric acid  Eye Irrit. 2, H319	25-50%
CAS: 497-19-8 EINECS: 207-838-8	sodium carbonate  Eye Irrit. 2, H319	2.5-10%
Polymer CAS: 146340-16-1	Fatty alcohol ethoxylate   Skin Irrit. 2, H 315; Aquatic Acute 1, H 400, Aquatic Chronic 3, H 412	< 1,0 %

EG Nr. 648/2004: nonionic surfactants: < 5%

Additional information For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures

- **General information** Remove any soiled clothing immediately.

- After inhaling

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

- After skin contact

Wash immediately with plenty of water and continue to rinse thoroughly. (Any remains of the caustic soda will only be washed out slowly).

A check-up at the doctor's is recommended.

- **After eye contact** Rinse opened eye for several minutes under running water.

- After swallowing

DO NOT induce vomiting! Danger of perforation.

Administer medicinal carbon

Call a doctor immediately.

- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

- **Danger** Danger of gastric perforation.

- 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 extinguishing measures that are suitable for the surroundings.

- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

- **5.3 Advice for firefighters** No special measures required.

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- **Protective equipment:** Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing. Keep unprotected people away.

Product forms slippery surface when combined with water.

- 6.2 Environmental precautions: Prevent material from reaching sewage system, holes and cellars.

- 6.3 Methods and material for containment and cleaning up:

Please use the dust-binding materials

Dispose of 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 information on disposal.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling

Notes on storage: At room temperature, standing on its lid.

Ensure adequate dust removal and prevent formation of dust.

- 7.2 Conditions for safe storage, including any incompatibilities

- Storage

- Requirements to be met by storerooms and containers:

Store the product in a cool, dry place.

Protect the product from moisture - keep dry and cool.

Laws and regulations regarding water hazard class apply.

- Information about storage in one common storage facility: Not required.

- Further information about storage conditions: Store in cool, dry conditions in well sealed containers.

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

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters

- Components with critical values that require monitoring at the workplace:

1310-73-2 sodium hydroxide

WEL Short-term value: 2 mg/m³

DNEL values inhalativ, long-term, local effects: 1 mg / cbm (workers)

1 mg / cbm (general population)

- 8.2 Exposure controls

- Personal protective equipment

Not required for the assembled product.

Data refer to the bulk.

- General protective and hygienic measures

Keep away from foodstuffs, beverages and fodder.

Remove any soiled and impregnated clothing immediately.

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

- Breathing equipment: Not required.

- Protection of hands: Protective gloves.

- Material of gloves

Natural rubber, NR

Recommended thickness of the material: ≥ 0.5 mm

- Penetration time of glove material

The exact penetration time which should be observed can be given by the glove manufacturer.

The exact penetration time which should be observed can be given by the glove manufacturer.

- Eye protection: Tightly sealed protective goggles.

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- **Body protection:** Protective work clothing.
- **Risk management measures** Due type of packaging exposure is not probably

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- General Information

- Appearance:

Form: Granulate

Colour: White

- Smell: Odorless

- Odour threshold: Not determined.

- Melting point/Melting range: Not determined

- Boiling point/Boiling range: Not determined

- Flash point: Not applicable

- Inflammability (solid, gaseous) Not determined.

- Ignition temperature:

Decomposition temperature: Not determined.

- Self-inflammability: Product is not self-igniting.

- Danger of explosion: Product is not explosive.

- Critical values for explosion:

Lower: Not determined.

Upper: Not determined.

- Steam pressure: Not applicable.

- Density: Not determined

- Relative density: Not determined.

- Vapour density: Not applicable.

- Evaporation rate: Not applicable.

- Solubility in / Miscibility with

Water: Fully soluble.

- Segregation coefficient (n-octanole/water): Not determined.

- Viscosity:

dynamic: Not applicable.

kinematic: Not applicable.

- 9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity

- 10.2 Chemical stability

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **10.4 Conditions to avoid** No further relevant information available.

- **10.5 Incompatible materials:** No further relevant information available.

- 10.6 Hazardous decomposition products:

No dangerous decomposition products known if used according to the specifications.

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SECTION 11: Toxicological information**- 11.1 Information on toxicological effects****- Acute toxicity:****- LD/LC50 values that are relevant for classification:****1310-73-2 sodium hydroxide**

Oral LD50 2000 mg/kg (rat)

- Primary irritant effect: Causes severe burns on skin, eyes, respiratory organs and mucous membranes.**- Sensitization:** No sensitizing effect known.**- Additional toxicological information:** Corrosive

Swallowing will have a strong caustic effect on mouth and throat and could lead to danger of perforation of oesophagus and stomach.

SECTION 12: Ecological information**- 12.1 Toxicity**

- Aquatic toxicity:	
1310-73-2 Sodium hydroxide	
LC50/48 h	133 - 189 mg/l (leuciscus idus)
LC50/96 h	99 mg/l (bluegill (lepomis macrochirus))
	45.4 mg/l (rainbow trout (oncorhynchus mykiss))
77-92-9 Citric acid	
EC0	> 10000 mg/l (bacteria)
EC50/72 h	~120 mg/l (water flea (daphnia magna))
LC50	440 - 760 mg/l (leuciscus idus)
497-19-8 Sodium carbonate	
EC50/48 h	256 mg/l (water flea (daphnia magna))
LC50/96 h	740 mg/l (gambusia affinis)
	300 mg/l (bluegill (lepomis macrochirus))
fatty alcohol ethoxylates	
EC50/48 h	0.1 - 1 mg/l (aquatic invertebrates)
LC50/96 h	0.1 - 1 mg/l (leuciscus idus)
NOEC/21 d	0.25 mg/l (aquatic invertebrates)

- 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:**

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

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: 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 together with household waste. Do not allow product to reach sewage system.

According to the local official regulations.

- Waste disposal key number: 070608

The waste disposal key numbers are organized according to branch and process classification in the European waste catalogue.

- European waste catalogue

The waste disposal key numbers are organized according to branch and process classification in the European waste catalogue.

- Uncleaned packagings:**- Recommendation:** Disposal must be made according to official regulations.**- Recommended cleaning agent:**

Collect small amounts of the product mechanically. Rinse away any residue with water.

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SECTION 14: Transport information

- 14.1 UN-Number	
- ADR, IMDG, IATA	UN1823
- 14.2 UN proper shipping name	
- ADR	1823 SODIUM HYDROXIDE, SOLID, mixture
- IMDG, IATA	SODIUM HYDROXIDE, SOLID
- 14.3 Transport hazard class(es)	
- ADR - Class	8 (C6) Corrosive substances.
- Label	8
- 14.4 Packing group	
- ADR	II
- 14.5 Environmental hazards:	
- Marine pollutant:	No
- 14.6 Special precautions for user	Warning: Corrosive substances.
- Kemler Number:	80
- Segregation groups	Alkalis
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
- Transport/Additional information:	
· Limited quantities (LQ)	LQ3, 1 kg
· Excepted quantities (EQ)	Code: E2
- ADR	
- Tunnel restriction code	E
- UN "Model Regulation":	UN1823, SODIUM HYDROXIDE, SOLID, mixture, 8, II

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations
- Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- 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

This H-phrases are valid to some extent only for ingredients and do not indicate the classification of the preparation / material.

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects

- Department issuing data specification sheet: Quality protection department.
- Contact: see Point I.