

# Safety data sheet

## according to 1907/2006/EC, Article 31, (EU) 2020/878

Revision: 16.11.2023

Version Nr. 16

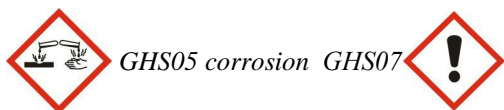
Replaces version of: 21.07.2023

### 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
- **UFI:** 5K80-S0SQ-S00U-YCK9
- **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. KG 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**



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.  
 STOT SE 3 H 335 May cause respiratory irritation.

- **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:** sodium hydroxide, citric acid
- **Hazard statements**  
H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.  
H 335 May cause respiratory irritation.
- **Precautionary statements**  
P 261 Avoid breathing dust.  
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<br>EINECS: 215-185-5 | sodium hydroxide<br> Met. Corr.1, H290; Skin Corr. 1A, H314   | 62,0 %  |
| CAS: 77-92-9<br>EINECS: 201-069-1   | citric acid<br> Eye Irrit. 2, H319; STOT SE 3, H 335   | 32,1%   |
| CAS: 497-19-8<br>EINECS: 207-838-8  | sodium carbonate<br> Eye Irrit. 2, H319   | 2.5-10% |
| Polymer<br>CAS: 146340-16-1         | Fatty alcohol ethoxylate<br>  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.

Specific concentraion limit - sodium hydroxide

Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Eye Irrit. 2 :: 0.5%<=C<2% Skin Irrit. 2 :: 0.5%<=C<2%

**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.
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**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.

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**SECTION 7: Handling and storage**
**- 7.1 Precautions for safe handling**

Notes on storage: At 0 - 50 °C , 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.

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**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/m<sup>3</sup>

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.  
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**- 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
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**SECTION 9: Physical and chemical properties**

|  |   |
|--|---|
| <b>- 9.1 Information on basic physical and chemical properties</b> |   |
| <b>- General Information</b>                                       |   |
| <b>- Appearance:</b>   |   |
| <b>State of aggregation:</b>                                       | <i>solid (granulate)</i>                          |
| <b>Colour:</b>   | <i>White</i>                                      |
| <b>- Smell:</b>  | <i>Odorless</i>                                   |
| <b>- Odour threshold:</b>  | <i>Not determined.</i>                            |
| <b>- Melting point/Melting range:</b>                              | <i>Not determined</i>                             |
| <b>- Boiling point/Boiling range:</b>                              | <i>Not determined</i>                             |
| <b>- Flash point:</b>  | <i>Not applicable</i>                             |
| <b>- Inflammability (solid, gaseous)</b>                           | <i>Not determined.</i>                            |
| <b>- Ignition temperature:</b>                                     |   |
| <b>Decomposition temperature:</b>                                  | <i>Not determined.</i>                            |
| <b>- Self-inflammability:</b>                                      | <i>Product is not self-igniting.</i>              |
| <b>- Danger of explosion:</b>                                      | <i>Product is not explosive.</i>                  |
| <b>- Critical values for explosion:</b>                            |   |
| <b>Lower:</b>  | <i>Not determined.</i>                            |
| <b>Upper:</b>  | <i>Not determined.</i>                            |
| <b>- Steam pressure:</b>   | <i>Not applicable.</i>                            |
| <b>- Density</b>   | <i>Not determined</i>                             |
| <b>- Relative density</b>  | <i>Not determined.</i>                            |
| <b>- Vapour density</b>  | <i>Not applicable.</i>                            |
| <b>- Evaporation rate</b>  | <i>Not applicable.</i>                            |
| <b>- Solubility in / Miscibility with</b>                          |   |
| <b>Water:</b>  | <i>Fully soluble.</i>                             |
| <b>- Segregation coefficient (n-octanole/water):</b>               |   |
| <i>Not determined.</i>   |   |
| <b>- Viscosity:</b>  |   |
| <b>dynamic:</b>  | <i>Not applicable.</i>                            |
| <b>kinematic:</b>  | <i>Not applicable.</i>                            |
| <b>- 9.2 Other information</b>                                     | <i>No further relevant information available.</i> |

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**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. Endocrine disrupting properties. Does not contain an endocrine disruptor (EDC) in a concentration of  $\geq 0,1\%$ .

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

|                                   |   |
|-----------------------------------|---|
| <b>- Aquatic toxicity:</b>        |   |
| <b>1310-73-2 Sodium hydroxide</b> |   |
| 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)) |
| <b>77-92-9 Citric acid</b>        |   |
| EC0                               | > 10000 mg/l (bacteria)                         |
| EC50/72 h                         | ~120 mg/l (water flea (daphnia magna))          |
| LC50                              | 440 - 760 mg/l (leuciscus idus)                 |
| <b>497-19-8 Sodium carbonate</b>  |   |
| EC50/48 h                         | 256 mg/l (water flea (daphnia magna)) LC50/96   |
| h 740 mg/l                        | (gambusia affinis)                              |
|                                   | 300 mg/l (bluegill (lepomis macrochirus))       |
| <b>fatty alcohol ethoxylates</b>  |   |
| 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 Endocrine disrupting properties.** Does not contain an endocrine disruptor (EDC) in a concentration of  $\geq 0,1\%$ .**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**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.

H 335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects

**\*Data compared to the previous version altered.**

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