

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

Printing date 03.01.2017

Version number 106

Revision: 03.01.2017

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

#### - 1.1 Product identifier

- Trade name **Cleaner 05**

#### - 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** Cleaner

#### - 1.3 Details of the supplier of the safety data sheet

- **Manufacturer/Supplier:**

PERKUTE - Maschinenbau GmbH

Düsterbergstr. 10

D-48432 Rheine

Tel. ++ 49 / 59 71 / 80 81 68 - 0

Fax ++ 49 / 59 71 / 80 81 68 - 1

E-Mail: [info@perkute.de](mailto:info@perkute.de)

- **Informing department:** Product safety department

#### - 1.4 Emergency telephone number:

Poison Control Center, Mainz

Tel. 00 49 / 61 31 / 19 240

### \* 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 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

##### - Signal word *Danger*

##### - Hazard-determining components of labelling:

sodium hydroxide

tetrasodium pyrophosphate

##### - Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

##### - Precautionary statements

P260 Do not breathe dust/fume/gas/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.

P310 Immediately call a POISON CENTER/doctor.

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 Mixtures**
- **Description:** Mixture of the following components

- **Dangerous components:**

CAS: 1310-73-2 EINECS: 215-185-5 Reg.nr.: 01-2119457892-27	sodium hydroxide Met. Corr. 1, H290; Skin Corr. 1A, H314	50-100%
CAS: 7722-88-5 EINECS: 231-767-1 Reg.nr.: 01-2119489794-17	tetrasodium pyrophosphate Eye Dam. 1, H318; Acute Tox. 4, H302	2.5-10%

- **Composition/Ingredients**
- Constituents according to EC-Regulation 648/2004:
- < 5 % phosphates,
- further constituents: alkalis, salts of organic acids, auxiliary agents.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General advice:**
- Instantly remove any clothing soiled by the product.
- In case of unconsciousness bring patient into stable side position for transport.
- **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 persists, seek medical advice.
- **After eye contact**
- Rinse immediately opened eye for several minutes under running water. Then consult doctor.
- **After swallowing**
- Rinse out mouth and then drink plenty of water.
- Do not induce vomiting; instantly call for medical help.
- **4.2 Most important symptoms and effects, both acute and delayed**
- Burning effect and pain to eyes, skin and mucous membranes. After swallowing serious irritation to oral cavity and throat as well as danger of perforation of the gullet.
- **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**
- Product is non-flammable. Use fire fighting measure that suit the surroundings.
- **For safety reasons unsuitable extinguishing agents** Water.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

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**- 5.3 Advice for firefighters****- Protective equipment:**

See section 8.

Wear full protective suit with self-contained breathing apparatus.

### SECTION 6: Accidental release measures

**- 6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep off unprotected persons

Ensure adequate ventilation

Avoid causing dust.

**- 6.2 Environmental precautions:**

Do not allow to enter drainage system, surface or ground water.

Damp down dust with water spray jet.

If large amounts are released, the authorities must be informed.

**- 6.3 Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

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

Pick up mechanically and rinse the remainder with water. Avoid dust development. Place in suitable container and send to be recycled or disposed of (taking item 13 into account).

**- 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**

Keep containers tightly sealed.

Prevent formation of dust.

When diluting, always stir the product into standing water.

**- 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:**

Observe official regulations on storage and handling of water hazardous substances

Do not use light alloy containers.

Product contains metal corrosive ingredients.

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

Keep container tightly sealed.

Store under dry conditions.

**- 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 (50-100%)**WEL Short-term value: 2 mg/m<sup>3</sup>

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**7722-88-5 tetrasodium pyrophosphate (2.5-10%)**WEL Long-term value: 5 mg/m<sup>3</sup>**- DNELs****1310-73-2 sodium hydroxide**

Oral	DNEL (worker)	2.3 mg/kg bw/day (Long-term - systemic effects)
Dermal	DNEL (population)	11718 mg/kg bw/day (Long-term - systemic effects)
	DNEL (worker)	< 2 % wt. (Acute - local effects)
		11718 mg/kg bw/day (Long-term - systemic effects)
Inhalative	DNEL (population)	2.5 mg/m <sup>3</sup> (Acute - local effects)
		5.7 mg/m <sup>3</sup> (Long-term - systemic effects)
	DNEL (worker)	2.1 mg/m <sup>3</sup> (Long-term - systemic effects)
		1 mg/m <sup>3</sup> (Long-term - local effects) (most sensitive endpoint: Irritation)

**7722-88-5 tetrasodium pyrophosphate**

Inhalative	DNEL (population)	0.68 - 10.87 mg/m <sup>3</sup> (Long-term - systemic effects)
	DNEL (worker)	2.79 - 44.08 mg/m <sup>3</sup> (Long-term - systemic effects)

**- PNECs****1310-73-2 sodium hydroxide**

PNEC STP	51 mg/l (n.a.)
PNEC aqua	6.4 mg/l (fresh water)
	0.64 mg/l (marine water)
	3.1 mg/l (intermittent releases)
PNEC sediment	2.3 mg/kg dw (marine water)
PNEC soil	23 mg/kg dw (fresh water)
	0.853 mg/kg dw (soil)

**7722-88-5 tetrasodium pyrophosphate**

PNEC STP	50 mg/l (380)
PNEC aqua	0.05 mg/l (fresh water)
	0.005 mg/l (marine water)
	0.5 mg/l (intermittent releases)

**- 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**

Keep away from food, beverages and fodder.  
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.  
Do not inhale dust. Prevent formation of dust.

**- Breathing equipment:** Breathing protection to be used where a build-up of dust occurs.

**- Recommended filter device for short term use:**

Filter P2

Take care of limitations and rules for the use of breathing protection equipment (BGR 190).

**- Protection of hands:** Protective gloves.

**- Material of gloves**

Butyl rubber, BR

Nitrile rubber, NBR

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Recommended thickness of the material:  $\geq 0.5$  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**

Note information regarding permeation rate, penetration times and the degradation supplied by the manufacturer of gloves just as workplace-specific conditions.

Change gloves if notice sign of disenchantment.

**- Eye protection:** Tightly sealed safety glasses.

**- Body protection:** Protective work clothing.

## SECTION 9: Physical and chemical properties

**- 9.1 Information on basic physical and chemical properties**

**- General Information**

**- Appearance:**

**Form:** Powder

**Colour:** White

**- Smell:** Odourless

**- pH-value (10 g/l) at 20 °C:** ~ 13

**- Change in condition**

**Boiling point/Boiling range:** Not determined

**- Flash point:** Product is non-flammable nor potentially explosive

**- Ignition temperature:** 400 °C

**- Self-inflammability:** Product is not selfigniting.

**- Danger of explosion:** Product is not potentially explosive

**- Density at 20 °C** ~ 1 g/cm<sup>3</sup>

**- Solubility in / Miscibility with**

**Water:** Fully miscible

**- Viscosity:**

**dynamic:** Not applicable.

**kinematic:** Not applicable.

**- 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**

Corrosive action on metals

Violent reaction with water at high temperatures

Diluting or dissolving in water always causes rapid heating

Reacts with light alloys in the presence of moisture to form hydrogen

Strong exothermic reaction with acids

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

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- **10.5 Incompatible materials:** Light metals, acids, ammonium compounds.

- **10.6 Hazardous decomposition products:**

Reaction in contact with metal forming hydrogen.

Reaction with ammonium compounds forming ammonia.

## 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:**

### 1310-73-2 sodium hydroxide

Oral	LD50	2000 mg/kg (rat)
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### 7722-88-5 tetrasodium pyrophosphate

Oral	LD50	300-2000 mg/kg (rat) (OECD 420)
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Dermal	LD50	> 2000 mg/kg (rat)
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		> 2000 mg/kg (rabbit)
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Inhalative	LC 50 / 4 h	> 0.58 mg/l (rat) (OECD 403, Staub/Nebel)
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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.

- **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.

- **Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

### 1310-73-2 sodium hydroxide

EC 50 / 48 h	40.4 mg/l (shellfish)
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LC 50 / 96 h	33 - 196 mg/l (fish)
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### 7722-88-5 tetrasodium pyrophosphate

EC 50 / 24 h	916 mg/l (Daphnia magna) (OECD 202)
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EC 50 / 48 h	> 100 mg/l (Daphnia magna) (OECD 202)
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EC 50 / 72 h	> 100 mg/l (Desmodesmus subspicatus) (OECD 201)
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LC 0 / 48 h	> 500 mg/l (Leuciscus idus)
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LC 50 / 96 h	> 100 mg/l (Oncorhynchus mykiss) (OECD 203)
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NOEC / 72 h	> 100 mg/l (Desmodesmus subspicatus)
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**- 12.2 Persistence and degradability****7722-88-5 tetrasodium pyrophosphate**

DOC - Elimination 88 % (OECD 302 B) (302 B, Eliminierung)

**- 12.3 Bioaccumulative potential** No further relevant information available.**- 12.4 Mobility in soil** No further relevant information available.**- Ecotoxicological effects:****- Remark:** Harmful effect on fish, plankton and other waterorganism by pH shift possible.**- Respiratory inhibition of communal activated sludge EC 20 (mg/l according to ISO 8192 B):****7722-88-5 tetrasodium pyrophosphate**

EC 50 &gt; 1000 mg/l (activated sludge (method OECD 209))

**- Additional ecological information:****- General notes:**

Do not allow to enter drainage system, surface or ground water

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

**- 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**

The following advice is related to new material and not to any processed products. In case of a mixture with other products other disposal methods may become necessary. If in doubt seek advice from product supplier or from local authorities.

**- Recommendation**

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

A used product should be recycled or used in other contexts, otherwise be handed over to an appropriate disposal site.

**- Waste disposal key number:**

Since 01/01/99 the waste code numbers have not only been product-related but are also essentially application-related. The valid waste code number of the application can be obtained from the European waste catalogue.

**- Uncleaned packagings:****- Recommendation:**

Rented packaging: After optimal emptying, close immediately and return to the supplier without cleaning.

Care should be taken that no other materials get into the packaging.

Other containers: After complete emptying and cleaning, send to be reconditioned or recycled.

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

## SECTION 14: Transport information

**- 14.1 UN-Number****- ADR, IMDG, IATA**

UN3262

**- 14.2 UN proper shipping name****- ADR**3262 CORROSIVE SOLID, BASIC, INORGANIC,  
N.O.S. (SODIUM HYDROXIDE)

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- IMDG, IATA	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. MIXTURE
- 14.3 Transport hazard class(es)	
- ADR	
- Class	8 (C6) Corrosive substances.
- Label	8
- IMDG, IATA	
- Class	8 Corrosive substances.
- Label	8
- 14.4 Packing group	
- ADR, IMDG, IATA	II
- 14.6 Special precautions for user	Warning: Corrosive substances.
- Kemler Number:	80
- 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)	1 kg
- Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
- Transport category	2
- Tunnel restriction code	E
- IMDG	
- Limited quantities (LQ)	1 kg
- Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
- UN "Model Regulation":	UN3262, CORROSIVE SOLID, BASIC, INORGANIC, N.O.S., 8, II

## 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

- Signal word Danger

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**- Hazard-determining components of labelling:**

sodium hydroxide  
tetrasodium pyrophosphate

**- Hazard statements**

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.

**- Precautionary statements**

P260 Do not breathe dust/fume/gas/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.  
P310 Immediately call a POISON CENTER/doctor.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**- 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**

H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.

**- Department issuing data specification sheet:** see item 1: Informing department**- Abbreviations and acronyms:**

LEV: Local Exhaust Ventilation  
RPE: Respiratory Protective Equipment  
RCR: Risk Characterisation Ratio (RCR= PEC/PNEC)  
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 Harmonized System of Classification and Labelling of Chemicals  
CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)  
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)  
ISO: International Organisation for Standardisation  
DNEL: Derived No-Effect Level (REACH)  
PNEC: Predicted No-Effect Concentration (REACH)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
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  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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