Printing date 12.01.2023 Version number 1.00 Revision: 12.01.2023

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

· Product identifier

· Trade name: Kalklöser / descaler

· Article number: 00311968 · UFI: F0NY-J8Q0-4006-GTVQ

· 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

· Details of the supplier of the safety data sheet

Manufacturer/Supplier:

PMS Thomin GmbH Meckesheimer Str. 7/1 D-74939 Zuzenhausen Tel.: +49(0)6226-78933-0 info@pms-thomin.de www.pms-thomin.de

BSH Hausgeräte Service GmbH Werkskundendienst für Hausgeräte Leopoldstrasse 252 089 20 355 777 ersatzteile.de@bshg.com

- · Further information obtainable from: Product safety department
- · Emergency telephone number: Giftnotrufnummer: +49(0)160-92250872 (24 h erreichbar)

2 Hazards identification

- · 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. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · 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:

phosphoric acid

· Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P280 Wear protective gloves / 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.

P310 Immediately call a POISON CENTER/doctor.

P405 Store locked up.

· Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable. · **vPvB:** Not applicable.

3 Composition/information on ingredients

Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 5329-14-6 EINECS: 226-218-8 Reg.nr.: 01-2119488633-28- xxxx	sulphamidic acid Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	>10-<25%
CAS: 7664-38-2 EINECS: 231-633-2 Reg.nr.: 01-2119485924-24	phosphoric acid Met. Corr.1, H290; Skin Corr. 1B, H314; 小 Acute Tox. 4, H302 Specific concentration limits: Skin Corr. 1B; H314: C≥ 25 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 %	>2,5-<10%

[·] Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

- · Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

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

- · After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.
- Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed. No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

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6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

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

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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 disposal information.

7 Handling and storage

- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.
- · Storage class: 8 B
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Control parameters

Ingredients with limit values that require monitoring at the workplace:

7664-38-2 phosphoric acid

AGW (Germany) Long-term value: 2 E mg/m³

2(I);DFG, EU, AGS, Y

- Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Appropriate engineering controls No further data; see item 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- · Respiratory protection: Not required.
- · Hand protection

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.



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Check protective gloves prior to each use for their proper condition.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

After use of gloves apply skin-cleaning agents and skin cosmetics.

· Material of gloves

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0,5 mm

· 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/face protection



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

Physical state
Colour:
Odour:
Odourless
Odour threshold:
Melting point/freezing point:

Fluid

Colourless
Odourless
Not determined.

Undetermined.

· Boiling point or initial boiling point and

boiling range 100 °C (7732-18-5 water, distilled, conductivity or

of similar purity)

· Flammability Not applicable.

· Lower and upper explosion limit

Lower: Not determined.
 Upper: Not determined.
 Flash point: Not applicable.
 Decomposition temperature: Not determined.

pH at 20 °C

· Viscosity:

Kinematic viscosityDynamic:Not determined.Not determined.

Solubility

· water: Fully miscible.

· Partition coefficient n-octanol/water (log

value) Not determined.

· Vapour pressure at 20 °C: 23 hPa (7732-18-5 water, distilled, conductivity or

of similar purity)

· Density and/or relative density

Density at 20 °C: 1,065 g/cm³
 Relative density Not determined.
 Bulk density: 1005 kg/m³
 Vapour density Not determined.

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· Other information

· Appearance:

· Form: Fluid

· Important information on protection of health

and environment, and on safety.

· Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Void

Void

Change in condition

· Evaporation rate Not determined.

Information with regard to physical hazard

classes Void · Explosives Void · Flammable gases Void · Aerosols · Oxidising gases Void · Gases under pressure Void Flammable liquids Void Flammable solids Void · Self-reactive substances and mixtures Void · Pyrophoric liquids Void Void · Pyrophoric solids

· Self-heating substances and mixtures · Substances and mixtures, which emit

flammable gases in contact with water Void
Oxidising liquids Void
Oxidising solids Void
Organic peroxides Void

• Corrosive to metals May be corrosive to metals.

Desensitised explosives

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC5	· LD/LC50 values relevant for classification:	
ATE (A	cute T	oxicity Estimates)
Oral	LD50	39984 mg/kg (rat)

L			. ,			
_						
	5329-14	4-6 sul	ohamidic acid			
Ī	Oral	LD50	2065 mg/kg (rat)			
Ī	7664-38	8-2 pho	sphoric acid			
Ī	Oral	LD50	1530 mg/kg (rat)			
-					- / 0	

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Dermal LD50 2740 mg/kg (rabbit)

- · 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.
- 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.
- · Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Results of PBT and vPvB assessment
- · PBT: Not applicable.
- vPvB: Not applicable.
- · Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- · Other adverse effects
- · Additional ecological information:
- General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

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

European waste catalogue

20 01 29* | detergents containing hazardous substances

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

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Transport information	
· UN number or ID number · ADR, IMDG, IATA	UN3264
UN proper shipping name	
· ADR	3264 CORROSIVE LIQUID, ACIDIC, INORGANIC N.O.S. (SULPHAMIC ACID, PHOSPHORIC ACIE SOLUTION)
· IMDG	CORROSIVE LIQUID, ACIDIC, INORGANIC N.O.S. (SULPHAMIC ACID, PHOSPHORIC ACID SOLUTION)
·IATA	Corrosive liquid, acidic, inorganic, n.o.s (SULPHAMIC ACID, PHOSPHORIC ACID SOLUTION)
· Transport hazard class(es)	
· ADR, IMDG, IATA	
· Class	8 Corrosive substances.
· Label	8
· Packing group · ADR, IMDG, IATA	III
· Environmental hazards:	Not applicable.
· Special precautions for user · Hazard identification number (Kemler code) · EMS Number: · Segregation groups	Warning: Corrosive substances. : 80 F-A,S-B (SGG1) Acids
· Stowage Category · Stowage Code	SW2 Clear of living quarters.
Segregation Code	SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
· Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 100 ml
· Transport category · Tunnel restriction code	3 E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 100 ml
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UN "Model Regulation":

UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHAMIC ACID, PHOSPHORIC ACID, SOLUTION). 8. III

15 Regulatory information

- Directive 2004/42/EC
- · 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
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

- · National regulations:
- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this 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.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

ſ	· Classification according to Regulation (EC) No 1272/2008		
Ī	Corrosive to metals	On basis of test data	
-		The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.	

- Date of previous version: 02.01.2023
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

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

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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 Acute Tox. 4: Acute toxicity - Category 4

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

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

* Data compared to the previous version altered.