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

Printing date 07.05.2020 Version number 5 Revision: 07.05.2020

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

· **1.1 Product identifier**
· Trade name: **Rust Remover Paste**

· Article number: 10824
· **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 Cleaning agent/ Cleaner

· **1.3 Details of the supplier of the safety data sheet**
· Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH
Lechstrasse 28
D 90451 Nürnberg
Tel. +49(0)911-642960
Fax. +49(0)911-644456
e-mail info@akemi.de

· Further information obtainable from: Laboratory
· **1.4 Emergency telephone number:** Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.
+44 (171) 635 91 91
National Poison Inform. Centre
Medical Toxicology Unit
Avalonley Road
London SE14 5ER

* **SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**
· Classification according to Regulation (EC) No 1272/2008


GHS05 corrosion

Skin Corr. 1B 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: phosphoric acid
Alcohols, C13-C15 branched and linear, ethoxylated
· Hazard statements 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.
P103 Read label before use.
P260 Do not breathe mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

(Contd. on page 2)

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

Printing date 07.05.2020 Version number 5 Revision: 07.05.2020

Trade name: Rust Remover Paste

(Contd. of page 1)

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.
P310 Immediately call a POISON CENTER/doctor.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information: Contains biocidal products: reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1), 2-methyl-2H-isothiazol-3-one

· **2.3 Other hazards**
· Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.

* **SECTION 3: Composition/information on ingredients**

· **3.2 Chemical characterisation: Mixtures**
· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 7664-38-2 EINECS: 231-633-2 Index number: 015-011-00-6 Reg.nr.: 01-2119485924-24	phosphoric acid Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318 Acute Tox. 4, H302	25-50%
CAS: 157627-86-6 Reg.nr.: 02-2119548515-35-0000	Alcohols, C13-C15 branched and linear, ethoxylated Eye Dam. 1, H318 Acute Tox. 4, H302 Aquatic Chronic 3, H412	1-5%

· Regulation (EC) No 648/2004 on detergents / Labelling for contents

non-ionic surfactants	<5%

· 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: Immediately remove any clothing soiled by the product.
· After inhalation: Supply fresh air.
· 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.
· **4.2 Most important symptoms and effects, both acute and delayed** Profuse sweating
Gastric or intestinal disorders
· Information for doctor: Symptoms in intoxication with acids:
In case of oral intake symptoms depend on concentration and acidity of incorporated acid, and are corrosive eschar in mouth and throat, vomitting, severe dysphagia, shock and coma. Therapy measures: drink plenty of water. Administer 20 g Magnesia usta in milk oral; no hydrogen carbonate oral; pain relief measures; in indication of acidosis infusion of sodium hydrogencarbonate solution(5%).

(Contd. on page 3)

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

Printing date 07.05.2020 Version number 5 Revision: 07.05.2020

Trade name: Rust Remover Paste

(Contd. of page 2)

· **4.3 Indication of any immediate medical attention and special treatment needed** If swallowed, gastric irrigation with added, activated carbon.

* **SECTION 5: Firefighting measures**

· **5.1 Extinguishing media**
· Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **5.2 Special hazards arising from the substance or mixture** Formation of toxic gases is possible during heating or in case of fire.
· **5.3 Advice for firefighters**
· Protective equipment: Mount respiratory protective device.
Do not inhale explosion gases or combustion gases.

* **SECTION 6: Accidental release measures**

· **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.
Particular danger of slipping on leaked/spilled product.
Ensure adequate ventilation
· **6.2 Environmental precautions:** Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **6.3 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.
· **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 disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling** Keep receptacles tightly sealed.
· Information about fire - and explosion protection: No special measures required.

· **7.2 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: Do not store together with alkalis (caustic solutions).
· Further information about storage conditions: Keep container tightly sealed.
Protect from frost.
· **7.3 Specific end use(s)** No further relevant information available.

* **SECTION 8: Exposure controls/personal protection**

· Additional information about design of technical facilities: No further data; see item 7.

(Contd. on page 4)

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

Printing date 07.05.2020 Version number 5 Revision: 07.05.2020

Trade name: Rust Remover Paste

(Contd. of page 3)

· **8.1 Control parameters**

· Ingredients with limit values that require monitoring at the workplace:	
7664-38-2 phosphoric acid	
WEL	Short-term value: 2 mg/m³ Long-term value: 1 mg/m³

· DNELs		
7664-38-2 phosphoric acid		
Dermal	DNEL (Langzeit-wiederholt)	0.1 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	2 mg/m³ Air (ARB)
	DNEL (Langzeit-wiederholt)	1-10.7 mg/m³ Air (ARB)
		0.36-4.57 mg/m³ Air (BEV)

· Additional information: The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· 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 and skin.
· Respiratory protection: Not necessary if room is well-ventilated.
· Protection of hands: Preventive skin protection by use of skin-protecting agents is recommended.
After use of gloves apply skin-cleaning agents and skin cosmetics.
Skin protection agent recommendation for preventive skin shelter without use of protective gloves:
STOKODERM (http://www.stoko.com)
Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:
STOKO EMULSION (http://www.stoko.com)
Skin protection recommendation for skin cleaning after product handling:
FRAPANTOL (http://www.stoko.com)
Skin protection agent recommendation for skin aftercare:
STOKO VITAN (http://www.stoko.com)
The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times´ data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory anylyses of the company KCL GmbH in compliance with EN374.
This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: http://www.kcl.de).

Protective gloves

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

· Material of gloves
Butyl rubber, BR
Nitrile rubber, NBR
Fluorocarbon rubber (Viton)

(Contd. on page 5)

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

Printing date 07.05.2020 Version number 5 Revision: 07.05.2020

Trade name: Rust Remover Paste

(Contd. of page 4)

· Penetration time of glove material
Chloroprene rubber, CR
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.
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Value for the permeation: Level ≤ 6, 480 min

· For the permanent contact gloves made of the following materials are suitable:
Nitrile rubber, NBR
Camatril (KCL, Art_No. 730, 731, 732, 733)
Chloroprene rubber, CR
Camapren (KCL, Art_No. 720, 722, 726)
Butyl rubber, BR
Butoject (KCL, Art_No. 897, 898)
Fluorocarbon rubber (Viton)
Vitoject (KCL, Art_No. 890)

· As protection from splashes gloves made of the following materials are suitable:
Nitrile rubber, NBR
Camatril (KCL, 730, 731, 732, 733)
Dermatril (KCL, Art_No. 740, 741, 742)
Chloroprene rubber, CR
Camapren (KCL, Art_No. 720, 722, 726)

· Not suitable are gloves made of the following materials:
Leather gloves
Strong material gloves

· Eye protection:

Tightly sealed goggles

· Body protection:
Protective work clothing

*
SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· General Information	
· Appearance:	
Form:	Pasty
Colour:	Yellow-brown
· Odour:	Weak, characteristic
· pH-value at 20 °C:	<1
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100 °C
· Flash point:	Not applicable.
· Ignition temperature:	>370 °C
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Vapour pressure at 20 °C:	23 hPa
· Density at 20 °C:	1.27 g/cm³
· Solubility in / Miscibility with water:	Fully miscible.

(Contd. on page 6)

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

Printing date 07.05.2020 Version number 5 Revision: 07.05.2020

Trade name: Rust Remover Paste

(Contd. of page 5)

· Viscosity:	
Dynamic at 20 °C:	13,000 mPas
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.0 %
Water:	52.9 %
Solids content:	46.3 %
· **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 according to specifications.
· **10.3 Possibility of hazardous reactions** Reacts with alkali and metals.
Reacts with strong oxidising agents.
Reacts with metals forming 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:** Phosphorus oxides (e.g. P2O5)
Irritant gases/vapours

*
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 relevant for classification:

ATE (Acute Toxicity Estimates)		
Oral	LD50	>2,921-3,204 mg/kg (rat)

7664-38-2 phosphoric acid		
Oral	LD50	1,250 mg/kg (rat)
	NOAEL	≥410 mg/kg (rat)
Dermal	LD50	2,740 mg/kg (rabbit)
Inhalative	LC50	850 mg/l (rat)
	LC50/1h	1.69 mg/l (rat)
157627-86-6 Alcohols, C13-C15 branched and linear, ethoxylated		
Oral	LD50	>500-2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
	LC50/48h	1-10 mg/l (Oncorhynchus mykiss)

· 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 (carcinogenity, 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.

(Contd. on page 7)

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

Printing date 07.05.2020 Version number 5 Revision: 07.05.2020

Trade name: Rust Remover Paste

(Contd. of page 6)

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

* **SECTION 12: Ecological information**

· **12.1 Toxicity**

· Aquatic toxicity:	
7664-38-2 phosphoric acid	
EC50	270 mg/l (BES)
	270 mg/l (bacteria)
EC50/48h	>100 mg/l (daphnia magna)
NOELR/72h	100 mg/l (Desmodesmus subspicatus)
EC50/72h	>100 mg/l (Desmodesmus subspicatus)
LC50/96h	138 mg/l (Gambusia affinis)
	98-106 mg/l (lem)
	3-3.25 mg/l (lepomis macrochirus)
157627-86-6 Alcohols, C13-C15 branched and linear, ethoxylated	
EC50/48h	1-10 mg/l (daphnia magna)
EC10	>1,000 mg/l (BES)
EC50/72h	1-10 mg/l (Scenedesmus subspicatus)

· **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:
· General notes: Must not reach sewage water or drainage ditch undiluted or unneutralised.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
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.
Water hazard class 1 (German Regulation) (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**
· Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue	
20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 29*	detergents containing hazardous substances

(Contd. on page 8)

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

Printing date 07.05.2020 Version number 5 Revision: 07.05.2020

Trade name: Rust Remover Paste

(Contd. of page 7)

· Uncleaned packaging:
· Recommendation: Disposal must be made according to official regulations.
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

*

SECTION 14: Transport information

· **14.1 UN-Number**	
· ADR, IMDG, IATA	UN3260
· **14.2 UN proper shipping name**	
· ADR	3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID)
· IMDG, IATA	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID)
· **14.3 Transport hazard class(es)**	
· ADR	
	
· Class	8 (C2) Corrosive substances.
· Label	8
· IMDG, IATA	
	
· Class	8 Corrosive substances.
· Label	8
· **14.4 Packing group**	
· ADR, IMDG, IATA	III
· **14.5 Environmental hazards:**	
· Marine pollutant:	No
· **14.6 Special precautions for user**	Warning: Corrosive substances.
· Hazard identification number (Kemler code):	80
· EMS Number:	F-A,S-B
· Segregation groups	Acids
· Stowage Category	A
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	E

(Contd. on page 9)

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

Printing date 07.05.2020 Version number 5 Revision: 07.05.2020

Trade name: Rust Remover Paste

(Contd. of page 8)

· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID), 8, III

*
SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· 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
· National regulations:	
· Waterhazard class:	Water hazard class 1 (Self-assessment): slightly hazardous for water.
· VOC EU	0.0 g/l
· **15.2 Chemical safety assessment:**	A Chemical Safety Assessment has not been carried out.

*
SECTION 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. H318 Causes serious eye damage. H412 Harmful to aquatic life with long lasting effects.
· Recommended restriction of use	refer to Technical Data Sheet (TDS)
· Department issuing SDS:	Laboratory
· Abbreviations and acronyms:	RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation 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 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) DNEL: Derived No-Effect Level (REACH) 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 - oral – Category 4 Skin Corr. 1B: Skin corrosion/irritation – Category 1B Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
· * Data compared to the previous version altered.	Adaptation in accordance with REACH directive 1907/2006/EC