

Printing date 12/16/2005

Reviewed on 12/16/2005

1 Identification of substance· Product details

- Trade name: **Rust Remover Paste**
- Article number: 10824
- Application of the substance / the preparation Cleaning agent/ Cleaner
- 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
- Information department: Laboratory

2 Composition/Data on components· Chemical characterization

- Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 7664-38-2	phosphoric acid	25-50%
EINECS: 231-633-2	C; R 34	
EU Number: 015-011-00-6		

Aliphatic alcohols, C13-C15, largely linear, ethoxylated	1-5%
Xn, N; R 22-41-50	

CAS: 110-65-6	but-2-yne-1,4-diol	<1%
EINECS: 203-788-6	T; R 21-23/25-34-43-48/22	
EU Number: 603-076-00-9		

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

3 Hazards identification

- Hazard description: C Corrosive
- Information pertaining to particular dangers for man and environment: The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Causes burns.
- Classification system: The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- NFPA ratings (scale 0 - 4) Health = 3
Fire = 0
Reactivity = 0
- HMIS-ratings (scale 0 - 4) Health = 3
Fire = 0
Reactivity = 0

4 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 copious amounts of water and provide fresh air. Immediately call a doctor.

5 Fire fighting measures

- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Protective equipment: No special measures required.

(Contd. on page 2)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/16/2005

Reviewed on 12/16/2005

Trade name: **Rust Remover Paste**

(Contd. of page 1)

6 Accidental release measures

- Person-related safety precautions: Wear protective equipment. Keep unprotected persons away. Particular danger of slipping on leaked/spilled product.
- Measures for environmental protection: Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- Measures for cleaning/collecting: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- Handling:
- Information for safe handling: Keep receptacles tightly sealed.
- Information about protection against explosions and fires: No special measures required.
- 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 receptacle tightly sealed.
Protect from frost.

8 Exposure controls and personal protection

- Additional information about design of technical systems: No further data; see item 7.
 - Components with limit values that require monitoring at the workplace:
- 7664-38-2 phosphoric acid**
- PEL 1 mg/m³
REL Short-term value: 3 mg/m³
Long-term value: 1 mg/m³
TLV Short-term value: 3 mg/m³
Long-term value: 1 mg/m³
- Additional information: The lists that were valid during the creation were used as basis.
 - 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.
 - Breathing equipment: Not required.
 - Protection of hands: Protective gloves
 - Material of gloves: Butyl rubber, BR
Nitrile rubber, NBR
Fluorocarbon rubber (Viton)
Chloroprene rubber, CR
PVC 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.
 - 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 protection: Tightly sealed goggles

(Contd. on page 3)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/16/2005

Reviewed on 12/16/2005

Trade name: **Rust Remover Paste**

(Contd. of page 2)

· Body protection: Protective work clothing

9 Physical and chemical properties

· General Information

Form: Pasty
Color: Yellow-brown
Odor: Weak, characteristic

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

· Flash point: Not applicable.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Density at 20°C (68°F): ~ 1.28 g/cm³

· Solubility in / Miscibility with Water: Fully miscible.

· pH-value at 20°C (68°F): < 1

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
 · Dangerous reactions Reacts with alkali and metals.
 Reacts with strong oxidizing agents.
 Reacts with metals forming hydrogen.

· Dangerous products of decomposition: Phosphorus oxides (e.g. P₂O₅)
 Irritant gases/vapors

11 Toxicological information

· Acute toxicity:
 · Primary irritant effect:
 · on the skin: Caustic effect on skin and mucous membranes.
 · on the eye: Strong caustic effect.
 · Sensitization: No sensitizing effects known.
 · Additional toxicological information: The product shows the following dangers according to internally approved calculation methods for preparations:
 Corrosive
 Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

· General notes: Must not reach bodies of water or drainage ditch undiluted or unneutralized.
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
 Water hazard class 1 (Self-assessment): slightly hazardous for water
 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.

(Contd. on page 4)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/16/2005

Reviewed on 12/16/2005

Trade name: **Rust Remover Paste**

(Contd. of page 3)

13 Disposal considerations

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

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

14 Transport information

- DOT regulations:
- Hazard class: 8
- Identification number: UN3260
- Packing group: III
- Proper shipping name (technical name): CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, LIQUID, 1,4-BUTYNE-1,3-DIOL)

- Label 8
- Land transport ADR/RID (cross-border):
- ADR/RID class: 8 (C2) Corrosive substances
- Danger code (Kemler): 80
- UN-Number: 3260
- Packaging group: III
- Description of goods: 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, 1,4-BUTYNE-1,3-DIOL)

- Maritime transport IMDG:
- IMDG Class: 8
- UN Number: 3260
- Label 8
- Packaging group: III
- EMS Number: F-A,S-B
- Marine pollutant: No
- Proper shipping name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, LIQUID, 1,4-BUTYNE-1,3-DIOL)

- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: 8
- UN/ID Number: 3260
- Label 8
- Packaging group: III
- Proper shipping name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, LIQUID, 1,4-BUTYNE-1,3-DIOL)

* 15 Regulations

- Sara
- Section 355 (extremely hazardous substances):
None of the ingredient is listed.
- Section 313 (Specific toxic chemical listings):
7664-38-2 phosphoric acid
- TSCA (Toxic Substances Control Act):
7732-18-5 water, distilled, conductivity or of similarpurity

7664-38-2 phosphoric acid

7631-86-9 silicon dioxide, chemically prepared

110-65-6 but-2-yne-1,4-diol
- Proposition 65
- Chemicals known to cause cancer:
None of the ingredients is listed.

(Contd. on page 5)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 12/16/2005

Reviewed on 12/16/2005

Trade name: **Rust Remover Paste**

(Contd. of page 4)

- Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.
- Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.
- Chemicals known to cause developmental toxicity:
None of the ingredients is listed.
- Cancerogeny categories
- EPA (Environmental Protection Agency)
None of the ingredients is listed.
- IARC (International Agency for Research on Cancer)
7631-86-9 silicon dioxide, chemically prepared: 3

50-00-0 formaldehyde: 2A
- NTP (National Toxicology Program)
50-00-0 formaldehyde: R
- TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.
- MAK (German Maximum Workplace Concentration)
None of the ingredients is listed.
- NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.
- OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.
- Product related hazard informations:
The product has been classified and marked in accordance with directives on hazardous materials.
- Hazard symbols:
C Corrosive
- Hazard-determining components of labelling:
phosphoric acid
- Risk phrases:
Causes burns.
- Safety phrases:
Keep locked up and out of the reach of children.
Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately.
Dispose of this material and its container at hazardous or special waste collection point
- National regulations:
- Water hazard class:
Water hazard class 1 (Self-assessment): slightly hazardous for water.

* 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.

- Department issuing MSDS:
Laboratory
- Contact:
Dieter Zimmermann
- * Data compared to the previous version altered.