

Printing date 05/07/2007

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1 Identification of substance

Product details

- Trade name: **Anti-Slide R9**
- Article number: 11861, 11862
- Application of the substance / the preparation Discharging agent
- 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:

	nichtionische Tenside	Xn, Xi, N; R 22-41-50	1-5 %
CAS: 1341-49-7 EINECS: 215-676-4 EU Number: 009-009-00-4	ammonium bifluoride	T, C; R 25-34	<12.5%
CAS: 112-34-5 EINECS: 203-961-6 EU Number: 603-096-00-8	2-(2-butoxyethoxy)ethanol	Xi; R 36	1-5%
CAS: 7664-38-2 EINECS: 231-633-2 EU Number: 015-011-00-6	phosphoric acid	C; R 34	1-5%

- 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.
Harmful if swallowed.
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.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation:

Supply fresh air.
In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

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- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Immediately call a doctor.
Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Information for doctor:** Inhalation of hydrogen halides (e.g., hydrogen fluoride, HF): coughing, throttling; after symptom free interval fever, cyanosis (blue colouring of skin and mucous membranes due to lack of oxygen saturation of blood, lung edema).
Therapy in inhalation of HF: glucokorticoids as inhaler and intravenous.
Local effects of hydrohalogenous acids (e.g., HF): corrosion, in areas of eyes danger of sight loss, severe pain.
Therapy in skin corrosion: immediate rinsing of skin and mucous membranes with plenty of water; injection/infusion of
1) Hyaluronidase in Procain (2%),
2) Injection of a 1:1 mixture of Procain (4%) and calcium gluconate (20%) solution
3) initially parenteral and local application of glucocorticoids, followed by oral or local administration.
Acute poisoning: corrosive necroses, body pain, nausea, diarrhea, cramps, shock conditions.
In case of poisoning/exposition: immediate hospital admission, gastric rinsing with calcium chloride solution (1%), if indicated with suspension of calcium carbonate; domestic poisoning: administration of milk, provoke vomiting; application of calcium gluconate intravenous under control of hematology parameters.
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, vomiting, 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%).

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.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Dilute with plenty of water.
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.
Ensure good ventilation/exhaustion at the workplace.

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· 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: Not required.
- Further information about storage conditions: Protect from frost.
Keep receptacle tightly sealed.

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/m ³
REL	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
TLV	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³

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

· **Personal protective equipment:**

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Do not eat, drink, smoke or sniff while working.
Use skin protection cream for skin protection.
Clean skin thoroughly immediately after handling the product.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



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
Preventive skin protection by use of skin-protecting agents is recommended.

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

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 analyses 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

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detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell,
internet: <http://www.kcl.de>).

- Material of gloves Chloroprene rubber, CR
Fluorocarbon rubber (Viton)
Butyl rubber, BR
- Penetration time of glove material 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 \geq 6, 480 min
- For the permanent contact gloves made of the following materials are suitable: Camatril (KCL, Art No. 730, 731, 732, 733)
Vitoject (KCL, Art No. 890)
Butoject (KCL, Art No. 897, 898)
- As protection from splashes gloves made of the following materials are suitable: Camatril (KCL, 730, 731, 732, 733)
Camapren (KCL, Art No. 720, 722, 726)
- Not suitable are gloves made of the following materials: Natural rubber, NR
Leather gloves
Strong gloves
- Eye protection:  Tightly sealed goggles
- Body protection: Protective work clothing

9 Physical and chemical properties**· General Information**

Form:	Fluid
Color:	Colorless
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.

· **Vapor pressure at 20°C (68°F):** 23 hPa (17 mm Hg)

· **Density at 20°C (68°F):** 1.05 g/cm³

· **Solubility in / Miscibility with Water:** Fully miscible.

· **pH-value at 20°C (68°F):** ~ 2

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)

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Irritant gases/vapors

11 Toxicological information**· Acute toxicity:**

· LD/LC50 values that are relevant for classification:

112-34-5 2-(2-butoxyethoxy)ethanol

Oral LD50 5660 mg/kg (rat)

Dermal LD50 4120 mg/kg (rbt)

Aliphatic alcohols, C13-C15, largely linear, ethoxylated

Oral LD50 >2000 mg/kg (Rat)

7664-38-2 phosphoric acid

Oral LD50 1530 mg/kg (rat)

Dermal LD50 2740 mg/kg (rabbit)

Inhalative LC50/4 h > 0.21 mg/l (rat)

9043-30-5 alpha-iso-Tridecyl-omega-hydroxy-polyglykolether

Oral LD50 > 5000 mg/kg (rat)

Dermal LD50 > 2000 mg/kg (rat)

· 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:

Harmful

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**· Ecotoxicological effects:**· Acquatic toxicity:**112-34-5 2-(2-butoxyethoxy)ethanol**

EC5 73 mg/l (Entosiphon sulcatum)

EC50/48h > 100 mg/l (daphnia magna)

EC50/96h > 100 mg/l (Scenedesmus subspicatus)

LC50/96h 1300 mg/l (Iepomis macrochirus)

7664-38-2 phosphoric acid

EC50 270 mg/l (bacteria)

LC50/96h 138 mg/l (Gambusia affinis)

9043-30-5 alpha-iso-Tridecyl-omega-hydroxy-polyglykolether

LC0/96h 180 mg/l (Brachydanio rerio)

LC100/96h 350 mg/l (Brachydanio rerio)

LC50/96h 250 mg/l (Brachydanio rerio)

· **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

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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:** Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information· **DOT regulations:**

- **Hazard class:** 8
- **Identification number:** UN3265
- **Packing group:** II
- **Proper shipping name (technical name):** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (AMMONIUM HYDROGENDIFLUORIDE)
- **Label:** 8

· **Land transport ADR/RID (cross-border):**

- **ADR/RID class:** 8 (C3) Corrosive substances
- **Danger code (Kemler):** 80
- **UN-Number:** 3265
- **Packaging group:** II
- **Description of goods:** 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (AMMONIUM HYDROGENDIFLUORIDE)

· **Maritime transport IMDG:**

- **IMDG Class:** 8
- **UN Number:** 3265
- **Label:** 8
- **Packaging group:** II
- **EMS Number:** F-A,S-B
- **Marine pollutant:** No
- **Propper shipping name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (AMMONIUM HYDROGENDIFLUORIDE)

· **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** 8
- **UN/ID Number:** 3265
- **Label:** 8

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· <u>Packaging group:</u>	II
· <u>Propper shipping name:</u>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (AMMONIUM HYDROGENDIFLUORIDE)

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

1341-49-7 ammonium bifluoride

112-34-5 2-(2-butoxyethoxy)ethanol

7664-38-2 phosphoric acid

· Proposition 65· Chemicals known to cause cancer:

None of the ingredients is listed.

· 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.

· Carcinogeny categories· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· 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:

ammonium bifluoride

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- Risk phrases: Harmful if swallowed.
Causes burns.
- Safety phrases: Keep locked up and out of the reach of children.
Do not breathe fumes
Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point
Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately.
Use only in well-ventilated areas.
- **National regulations:**
- Information about limitation of use: Employment restrictions concerning young persons must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
- Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- VOC USA 51.8 g/l / 0.43 lb/gl

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.**

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