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

· Product identifier

· Trade name: Impregnation Remover

 Article number: 12003, 12004

Relevant identified uses of the substance or mixture and uses advised against

· Application of the substance / the

Cleaning agent/ Cleaner preparation

· Details of the supplier of the safety data sheet

 Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH

Tel. +49(0)911-642960 Lechstrasse 28 Fax. +49(0)911-644456 D 90451 Nürnberg e-mail info@akemi.de

· Further information obtainable

from: Laboratory

Dieter Zimmermann

@mail D.Zimmermann@akemi.de

· 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.

2 Hazards identification

· Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC



C; Corrosive

R35: Causes severe burns.

· Information concerning particular

hazards for human 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. The classification is according to the latest editions of the EU-lists, and extended

· Classification system: by company and literature data.

· Label elements

· Labelling according to EU

guidelines:

The product has been classified and marked in accordance with EU Directives /

Ordinance on Hazardous Materials.

 Code letter and hazard designation of product:



C Corrosive

· Hazard-determining components

of labelling:

sodium hydroxide

· Risk phrases:

35 Causes severe burns.

· Safety phrases: 1/2 Keep locked up and out of the reach of children.

> 23 Do not breathe vapour/spray.

> 24/25 Avoid contact with skin and eyes.

> > (Contd. on page 2)



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|----------------------------------|--|--|
| | (Contd. of page 1) | |
| | 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. | |
| | 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 (show the label where possible). | |

· Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

Description: Mixture: consisting of the following components.

| · Dangerous components: | | |
|-------------------------------------|-------------------------------|--------|
| | non-ionic surfactants Xi R41 | 1-5 % |
| | ♦ Eye Dam. 1, H318 | |
| CAS: 1310-73-2 EINECS: 215-185-5 | sodium hydroxide C R35 | <12.5% |
| Index number: 011-002-00-6 | | |
| CAS: 3332-27-2 EINECS: 222-059-3 | Tetradecyldimethylaminoxid | 1-5% |
| | Eye Dam. 1, H318; | |

non-ionic surfactants

4 First aid measures

Additional information:

· 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

For the wording of the listed risk phrases refer to section 16.

transportation.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

· After eye contact: Rinse opened eye for several minutes under running water. Then consult a

doctor.

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

· After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.

· Information for doctor:

Most important symptoms and effects, both acute and delayed

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

No further relevant information available.

5 Firefighting measures

treatment needed

· Extinguishing media

· Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol

resistant foam.

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< 5%



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· Special hazards arising from the

substance or mixture

No further relevant information available.

· Advice for firefighters

• Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective

equipment and emergency

procedures Wear protective equipment. Keep unprotected persons away.

• Environmental precautions: Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage

system.

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 neutralizing 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

· Handling:

Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· 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:

<u>common storage facility:</u> Not required.

· Further information about storage

conditions: Protect from frost.

Keep container tightly sealed.

Storage class: 8 A

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about

design of technical facilities: No further data; see item 7.

· Control parameters

· Ingredients with limit values that require monitoring at the workplace:

1310-73-2 sodium hydroxide

WEL Short-term value: 2 mg/m³

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

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- · 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. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin. Not necessary if room is well-ventilated.

- Respiratory protection:
- · Protection of hands:



Protective gloves

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

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).

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

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.

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.

 For the permanent contact gloves made of the following materials are suitable:

Butyl rubber, BR

 As protection from splashes gloves made of the following materials are suitable:

Butoject (KCL, Art No. 897, 898) Butyl rubber, BR

 Not suitable are gloves made of the following materials:

Nitrile rubber, NBR

· Eye protection:



Tightly sealed goggles

· Body protection: Impervious protective clothing

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid Cloudy
Odour: Mild

Odour threshold: Not determined.

· pH-value at 20°C:

· Change in condition

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

Flash point:

Not applicable.

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature:

Decomposition temperature: Not determined.

Self-igniting: Product is not selfigniting.

• <u>Danger of explosion:</u> Product does not present an explosion hazard.

Explosion limits:

<u>Lower:</u> Not determined. Upper: Not determined.

· Vapour pressure at 20°C: 23 hPa

Density at 20°C:
Relative density
Vapour density
Evaporation rate
1.12 g/cm³
Not determined.
Not determined.
Not determined.

· Solubility in / Miscibility with

water: Fully miscible.

- Segregation coefficient (n-octanol/water): Not determined.

Viscosity:

<u>Dynamic:</u> Not determined. <u>Kinematic:</u> Not determined.

· Solvent content:

Organic solvents: 0.0 % Water: 86.4 %

• Other information No further relevant information available.

10 Stability and reactivity

· Reactivity

· 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
 Incompatible materials:
 No further relevant information available.
 No further relevant information available.

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· Hazardous decomposition

products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

Acute toxicity:

· LD/LC50 values relevant for classification:

1310-73-2 sodium hydroxide

Oral LD50 2000 mg/kg (rat)

Primary irritant effect:

 \cdot on the skin: Strong 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 the calculation method of

the General EU Classification Guidelines for Preparations as issued in the latest

version: 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

· Toxicity

Aquatic toxicity:

1310-73-2 sodium hydroxide

EC50/15min | 22 mg/l (Photobac. phosphoreum)

EC50/24h 76 mg/l (daphnia magna) LC50/96h 125 mg/l (Gambusia affinis)

Persistence and degradability biodegradable

· Behaviour in environmental systems:

Bioaccumulative potential
 Mobility in soil
 No further relevant information available.
 No further relevant information available.

· Additional ecological information:

General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly

hazardous for water

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

Results of PBT and vPvB assessment

 $\begin{array}{ll} \cdot \underline{\mathsf{PBT:}} & \mathsf{Not \ applicable.} \\ \cdot \underline{\mathsf{vPvB:}} & \mathsf{Not \ applicable.} \end{array}$

• Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

• Recommendation Must not be disposed together with household garbage. Do not allow product to

reach sewage system.

· Uncleaned packaging:

• Recommendation: Disposal must be made according to official regulations.

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· Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number

| · <u>ADR, IMDG, IATA</u> | UN1719 |
|---------------------------|---|
| · UN proper shipping name | |
| · ADR | 1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE) |
| · IMDG, IATA | CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE) |

· Transport hazard class(es)

· ADR



· <u>Class</u> 8 (C5) Corrosive substances.

· <u>Label</u>

· IMDG, IATA



ClassLabel8 Corrosive substances.8

· <u>Packing group</u> · ADR, IMDG, IATA

· Environmental hazards:

· Marine pollutant: No

• Special precautions for user Warning: Corrosive substances.

Danger code (Kemler):
EMS Number:
Segregation groups
Alkalis

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

ADR
Limited quantities (LQ)
Transport category
Tunnel restriction code

• <u>UN "Model Regulation":</u>
UN1719, CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE),

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations:
- · Information about limitation of use: Employment restrictions concerning juveniles must be observed.
- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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· 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
 H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage. H400 Very toxic to aquatic life.

R35 Causes severe burns. R38 Irritating to skin.

R41 Risk of serious damage to eyes. R50 Very toxic to aquatic organisms.

· Department issuing MSDS: Laboratory

· Contact: Dieter Zimmermann

Elke Hake

Fon ++49 (0)911 64296-59 @mail E.Hake@akemi.de

· Abbreviations and acronyms: 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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

GB