

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.02.2018

Version number 4

Revision: 08.02.2018

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

### 1.1 Product identifier

Trade name: **Cleaner for glass and plastics-Concentrate**

Article number: 11988

### 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



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

The product is classified and labelled according to the CLP regulation.



GHS02 GHS05

Signal word

Danger

Hazard-determining components of labelling:

Hazard statements

Alcohols, C12-C14, ethoxylated, sulphates, sodium salts  
H226 Flammable liquid and vapour.  
H318 Causes serious eye damage.  
H412 Harmful to aquatic life with long lasting effects.

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 08.02.2018

Version number 4

Revision: 08.02.2018

**Trade name: Cleaner for glass and plastics-Concentrate**

(Contd. of page 1)

- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>· <u>Precautionary statements</u></li> </ul> | P101<br>P102<br>P103<br>P210<br><br>P273<br>P280<br>P302+P352<br>P305+P351+P338<br><br>P403+P235<br>P501 | If medical advice is needed, have product container or label at hand.<br>Keep out of reach of children.<br>Read label before use.<br>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>Avoid release to the environment.<br>Wear protective gloves / eye protection.<br>IF ON SKIN: Wash with plenty of water.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>Store in a well-ventilated place. Keep cool.<br>Dispose of contents/container in accordance with local/regional/national/international regulations. |
|---|--|---|
- 
- **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:

	preservation agents Skin Corr. 1B, H314; Eye Dam. 1, H318 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Acute Tox. 4, H302	<1%
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 Reg.nr.: 01-2119457558-25-xxxx	propan-2-ol Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	12.5-25%
	Alcohols, C12-C14, ethoxylated, sulphates, sodium salts Eye Dam. 1, H318 Skin Irrit. 2, H315 Aquatic Chronic 3, H412	1-5%

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

perfumes, Quarernary ammonium compounds, benzyl-C12-16-alkyldimethyl, chloride

&lt;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: Take affected persons out into the fresh air.  
Keep warm, position comfortably and cover well.  
No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: If skin irritation continues, consult a doctor.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.

**4.2 Most important symptoms and effects, both acute and delayed**

 Breathing difficulty  
 Headache

(Contd. on page 3)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 08.02.2018

Version number 4

Revision: 08.02.2018

**Trade name:** Cleaner for glass and plastics-Concentrate

(Contd. of page 2)

- Information for doctor: Dizziness  
Dizziness  
Nausea  
Symptoms in alcohol intoxication:  
a) acute intoxication: euphoria, inhibitions, disturbances in co-ordination; in severe cases insensibility, respiratory dysfunction.  
b) chronic intoxication: CNS-, hepatic and cardiac dysfunctions with change of personality, alcohol induced hepatitis and reduced cardiac power.  
Therapy in alcohol intoxication:  
In acute intoxication observation of circulatory system, artificial breathing when indicated, gastrolavage, peritoneal or hemodialysis.  
Danger of impaired breathing.
- Hazards
- **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: CO<sub>2</sub>, 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.  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
Nitrogen oxides (NO<sub>x</sub>)  
Hydrogen chloride (HCl)  
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- Protective equipment: Do not inhale explosion gases or combustion gases.
- Additional information Cool endangered receptacles with water spray.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation  
Keep away from ignition sources.  
Use respiratory protective device against the effects of fumes/dust/aerosol.  
Particular danger of slipping on leaked/spilled product.
- **6.2 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.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Dilute with plenty water.  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
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.  
No dangerous substances are released.

(Contd. on page 4)

GB

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 08.02.2018

Version number 4

Revision: 08.02.2018

**Trade name:** Cleaner for glass and plastics-Concentrate

(Contd. of page 3)

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**

Keep receptacles tightly sealed.  
Store in cool, dry place in tightly closed receptacles.  
Keep away from heat and direct sunlight.  
When diluting always pour product into water and not vice versa.  
No special measures required.  
Ensure good ventilation/exhaustion at the workplace.

- 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:

Store only in the original receptacle.  
Prevent any seepage into the ground.

- Information about storage in one common storage facility:

Store away from oxidising agents.  
Store away from foodstuffs.

- Further information about storage conditions:

Protect from frost.  
Store receptacle in a well ventilated area.

- **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.

- **8.1 Control parameters**

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

**67-63-0 propan-2-ol**

WEL Short-term value: 1250 mg/m<sup>3</sup>, 500 ppm  
Long-term value: 999 mg/m<sup>3</sup>, 400 ppm

- Additional information:

The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- Personal protective equipment:

- General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.  
Apply water proof skin cream before starting work.  
Do not inhale gases / fumes / aerosols.  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.  
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:

- Respiratory protection:

- Protection of hands:

(Contd. on page 5)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 08.02.2018

Version number 4

Revision: 08.02.2018

**Trade name:** Cleaner for glass and plastics-Concentrate

(Contd. of page 4)

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 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 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.

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

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

· Material of gloves

Nitrile rubber, NBR  
Butyl rubber, BR  
Fluorocarbon rubber (Viton)

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

Value for the permeation: Level  $\leq$  6; 480 min

The exact break through 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:

Nitrile rubber, NBR  
Camatril (KCL, Art\_No. 730, 731, 732, 733)  
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)

· Not suitable are gloves made of the following materials:

Leather gloves  
Strong material gloves  
Goggles recommended during refilling  
Protective work clothing

· Eye protection:· Body protection:

(Contd. on page 6)

GB

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 08.02.2018

Version number 4

Revision: 08.02.2018

**Trade name:** Cleaner for glass and plastics-Concentrate

(Contd. of page 5)

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

##### General Information

##### Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Alcohol-like

pH-value at 20 °C: 9

##### Change in condition

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	82 °C

Flash point: > 55 °C

Ignition temperature: 425 °C

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

##### Explosion limits:

Lower:	2 Vol %
Upper:	12 Vol %

Vapour pressure at 20 °C: 43 hPa

Density at 20 °C: 0.98 g/cm<sup>3</sup>

##### Solubility in / Miscibility with water:

Not miscible or difficult to mix.

##### Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

##### Solvent content:

Organic solvents:	14.3 %
Water:	71.6 %

Solids content: 10.1 %

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 and stored according to specifications.

#### 10.3 Possibility of hazardous reactions

Reacts with strong acids.

#### 10.4 Conditions to avoid

No further relevant information available.

#### 10.5 Incompatible materials:

No further relevant information available.

#### 10.6 Hazardous decomposition products:

No dangerous decomposition products known.

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Acute toxicity: Based on available data, the classification criteria are not met.

##### Primary irritant effect:

##### Skin corrosion/irritation

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 08.02.2018

Version number 4

Revision: 08.02.2018

**Trade name:** Cleaner for glass and plastics-Concentrate

(Contd. of page 6)

- |   |   |
|---|---|
| · Serious eye damage/irritation   | Causes serious eye damage.  |
| · Respiratory or skin sensitisation   | Based on available data, the classification criteria are not met. |
| · CMR effects (carcinogenicity, 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. |
| · Aspiration hazard   | Based on available data, the classification criteria are not met. |

**SECTION 12: Ecological information**

- |  |  |
|--|--|
| · <b>12.1 Toxicity</b>                           |  |
| · Aquatic toxicity:                              | No further relevant information available.   |
| · <b>12.2 Persistence and degradability</b>      | No further relevant information available.   |
| · <b>12.3 Bioaccumulative potential</b>          | No further relevant information available.   |
| · <b>12.4 Mobility in soil</b>                   | No further relevant information available.   |
| · Additional ecological information:             |  |
| · General notes:                                 | Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.<br>Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water |
| · <b>12.5 Results of PBT and vPvB assessment</b> |  |
| · PBT:   | Not applicable.  |
| · vPvB:  | Not applicable.  |
| · <b>12.6 Other adverse effects</b>              | No further relevant information available.   |

**SECTION 13: Disposal considerations**

- |                                       |  |
|---------------------------------------|--|
| · <b>13.1 Waste treatment methods</b> |  |
| · Recommendation                      | Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.<br>Smaller quantities can be disposed of with household waste. |
| · Uncleaned packaging:                |  |
| · Recommendation:                     | Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.   |

**SECTION 14: Transport information**

- |                                       |   |
|---------------------------------------|---|
| · <b>14.1 UN-Number</b>               |   |
| · ADR, IMDG, IATA                     | UN1993  |
| · <b>14.2 UN proper shipping name</b> |   |
| · ADR                                 | 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL)) |
| · IMDG, IATA                          | FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))      |

(Contd. on page 8)

GB



# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 08.02.2018

Version number 4

Revision: 08.02.2018

**Trade name:** Cleaner for glass and plastics-Concentrate

(Contd. of page 7)

**14.3 Transport hazard class(es)**

· ADR



· Class 3 (F1) Flammable liquids.  
 · Label 3

· IMDG, IATA



· Class 3 Flammable liquids.  
 · Label 3

**14.4 Packing group**

· ADR, IMDG, IATA III

**14.5 Environmental hazards:**

· Marine pollutant: No

**14.6 Special precautions for user**

Warning: Flammable liquids.  
 · Danger code (Kemler): 30  
 · EMS Number: F-E, S-E  
 · 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) 5L  
 · 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 D/E

· IMDG  
 · Limited quantities (LQ) 5L  
 · 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 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL)), 3, 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.  
 · Seveso category P5c FLAMMABLE LIQUIDS

(Contd. on page 9)



# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 08.02.2018

Version number 4

Revision: 08.02.2018

**Trade name: Cleaner for glass and plastics-Concentrate**

(Contd. of page 8)

- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- 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 140.5 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 H225 Highly flammable liquid and vapour.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.
- Recommended restriction of use refer to Technical Data Sheet (TDS)
- Department issuing SDS: Laboratory
- Contact: Dieter Zimmermann  
Elke Hake  
Fon ++49 (0)911 64296-59  
@mail E.Hake@akemi.de
- 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)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Flam. Liq. 2: Flammable liquids – Category 2  
Flam. Liq. 3: Flammable liquids – Category 3  
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  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – 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