

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/27/2015

Reviewed on 03/27/2015

## 1 Identification

### · Product identifier

· Trade name: **Akelux Primer**

· Article number: 62013

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

No further relevant information available.

· Application of the substance / the mixture

Layer to promote adhesion

### · 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

· Information department:

Laboratory

### · 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 Hazard(s) identification

### · Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 Health hazard

Carc. 1A H350 May cause cancer.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

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

Flammable.

### · Information concerning particular hazards for human and environment:

The product is skin-resorbing.

Contact with skin and inhalation of aerosols/ vapours of the preparation should be avoided.

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.

### · Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

### · Label elements

#### · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

#### · Hazard pictograms



GHS02 GHS07 GHS08

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**Trade name: Akelux Primer** (Contd. of page 1)

- Signal word Danger
- Hazard-determining components of labeling: ethanol
- Hazard statements H226 Flammable liquid and vapour.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H350 May cause cancer.
- 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.  
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
  
P302+P352 If on skin: Wash with plenty of water.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
- NFPA ratings (scale 0 - 4)

	Health = 0 Fire = 3 Reactivity = 0
	Health = 0 Fire = 3 Reactivity = 0

- HMIS-ratings (scale 0 - 4)

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

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- Description: Mixture of the substances listed below with nonhazardous additions.

· <u>Dangerous components:</u>		
CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5	ethanol F R11 Flam. Liq. 2, H225 Carc. 1A, H350	50-100%
CAS: 64-19-7 EINECS: 200-580-7 Index number: 607-002-00-6	acetic acid C R35 R10 Flam. Liq. 3, H226 Skin Corr. 1A, H314	<12.5%
CAS: 2530-85-0 EINECS: 219-785-8 Index number: 607-134-00-4	3-trimethoxysilylpropyl methacrylate Xi R36/37/38 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335 H227	<1%

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

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**4 First-aid measures****· Description of first aid measures**

- General information: Take affected persons out into the fresh air. Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly. 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: Do not induce vomiting; immediately call for medical help. A person vomiting while lying on their back should be turned onto their side. If symptoms persist consult doctor.
- **Most important symptoms and effects, both acute and delayed** Breathing difficulty  
Headache  
Dizziness  
Dizziness  
Gastric or intestinal disorders  
Nausea
- Information for doctor: 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.  
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%).
- **Danger** Danger of impaired breathing.
- **Indication of any immediate medical attention and special treatment needed** Monitor circulation.  
If swallowed, gastric irrigation with added, activated carbon.

**5 Fire-fighting measures**

- **Extinguishing media**
- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- **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)
- **Advice for firefighters**
- Protective equipment: Wear self-contained respiratory protective device.

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· Additional information

Do not inhale explosion gases or combustion gases.  
Wear fully protective suit.  
Cool endangered receptacles with water spray.

\* **6 Accidental release measures**

· **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.  
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.  
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).

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

· **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**

· **Precautions for safe handling**

Store in cool, dry place in tightly closed receptacles.  
Keep away from heat and direct sunlight.  
Keep receptacles tightly sealed.  
Ensure good ventilation/exhaustion at the workplace.

· Information about protection against explosions and fires:

Highly volatile, flammable constituents are released during processing.  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.

· **Conditions for safe storage, including any incompatibilities**

· Storage:

· Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

· Information about storage in one common storage facility:

Store away from foodstuffs.

· Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· **Specific end use(s)**

No further relevant information available.

\* **8 Exposure controls/personal protection**

· Additional information about design of technical systems:

No further data; see item 7.

· **Control parameters**

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

**64-17-5 ethanol**

PEL Long-term value: 1900 mg/m<sup>3</sup>, 1000 ppm

REL Long-term value: 1900 mg/m<sup>3</sup>, 1000 ppm

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TLV	Short-term value: 1880 mg/m <sup>3</sup> , 1000 ppm
<b>64-19-7 acetic acid</b>	
PEL	Long-term value: 25 mg/m <sup>3</sup> , 10 ppm
REL	Short-term value: 37 mg/m <sup>3</sup> , 15 ppm Long-term value: 25 mg/m <sup>3</sup> , 10 ppm
TLV	Short-term value: 37 mg/m <sup>3</sup> , 15 ppm Long-term value: 25 mg/m <sup>3</sup> , 10 ppm

- Additional information: The lists that were valid during the creation were used as basis.
  - **Exposure controls**
  - 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.  
 Apply solvent resistant skin cream before beginning work.  
 Use skin protection cream for skin protection.  
 Wash hands before breaks and at the end of work.  
 Do not inhale gases / fumes / aerosols.
  - Breathing equipment:

Short term filter device:  
 Filter AX  
 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:

Preventive skin protection by use of skin-protecting agents is recommended.  
 After use of gloves apply skin-cleaning agents and skin cosmetics.
- 

**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 Butyl rubber, BR  
 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 ≤ 6, 480  
 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  
 Butoject (KCL, Art No. 897, 898)
  - As protection from splashes gloves made of the following materials are suitable: Chloroprene rubber, CR  
 Camapren (KCL, Art No. 720, 722, 726)
  - Not suitable are gloves made of the following materials: Nitrile rubber, NBR  
 Leather gloves  
 Natural rubber, NR  
 Strong gloves

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· Eye protection:

Tightly sealed goggles

· Body protection:

Protective work clothing

### \* 9 Physical and chemical properties

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

##### · General Information

##### · Appearance:

Form:	Fluid
Color:	Clear
· <u>Odor:</u>	Specific type

· pH-value at 20 °C (68 °F): 4

##### · Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	78 °C (172 °F)

· Flash point: 24 °C (75 °F)· Ignition temperature: 425 °C (797 °F)· Auto igniting: Product is not selfigniting.· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

##### · Explosion limits:

Lower:	3.5 Vol %
Upper:	15.0 Vol %

· Vapor pressure at 20 °C (68 °F): 59 hPa (44 mm Hg)· Density at 20 °C (68 °F): 0.8 g/cm<sup>3</sup> (6.676 lbs/gal)· Specific gravity at 20 °C (68 °F): 0.85 g/cm<sup>3</sup> (7.093 lbs/gal)

##### · Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

##### · Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

##### · Solvent content:

Organic solvents:	86.5 %
Water:	12.5 %

· **Other information** No further relevant information available.

### \* 10 Stability and reactivity

#### · **Reactivity**

#### · **Chemical stability**

#### · **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

#### · **Possibility of hazardous reactions**

Strong exothermic reaction with acids.  
Reacts with strong oxidizing agents.

#### · **Conditions to avoid**

No further relevant information available.

#### · **Incompatible materials:**

No further relevant information available.

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- **Hazardous decomposition products:** Aldehyde  
Carbon monoxide and carbon dioxide  
Flammable gases/vapors

\* **11 Toxicological information**

- **Information on toxicological effects**
- Acute toxicity:

· LD/LC50 values that are relevant for classification:

**ATE (Acute Toxicity Estimates)**

Oral	LD50	36778 mg/kg (rat)
Dermal	LD50	2117 mg/kg (rabbit)
Inhalative	LC50/4 h	68.9 mg/l (rat)

- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information: In addition to local irritant manifestations, there is a narcotic effect when inhaling high concentrations, with high danger of central respiratory arrest.

- Carcinogenic categories

· IARC (International Agency for Research on Cancer)

64-17-5	ethanol	1
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· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

**12 Ecological information**

- **Toxicity**
- Aquatic toxicity: No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** 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.  
Water hazard class 1 (Self-assessment): slightly hazardous for water
- **Results of PBT and vPvB assessment**
- PBT: Not applicable.
- vPvB: Not applicable.
- **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

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

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- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

**14 Transport information**

- |   |   |
|---|---|
| <b>· UN-Number</b>  | UN1170  |
| <b>· DOT, ADR, IMDG, IATA</b>   | UN1170  |
| <b>· UN proper shipping name</b>  | Ethanol solutions   |
| <b>· DOT</b>  | 1170 Ethanol solutions (Ethyl alcohol solutions)                  |
| <b>· ADR</b>  | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)                         |
| <b>· IMDG</b>   | ETHANOL SOLUTION  |
| <b>· IATA</b>   | ETHANOL SOLUTION  |
| <b>· Transport hazard class(es)</b>   |   |
| <b>· DOT</b>  |   |
|    |   |
| <b>· Class</b>  | 3 Flammable liquids   |
| <b>· Label</b>  | 3   |
| <hr style="border-top: 1px dashed #000;"/>  |   |
| <b>· ADR</b>  |   |
|  |   |
| <b>· Class</b>  | 3 (F1) Flammable liquids  |
| <b>· Label</b>  | 3   |
| <hr style="border-top: 1px dashed #000;"/>  |   |
| <b>· IMDG, IATA</b>   |   |
|  |   |
| <b>· Class</b>  | 3 Flammable liquids   |
| <b>· Label</b>  | 3   |
| <b>· Packing group</b>  | III   |
| <b>· DOT, ADR, IMDG, IATA</b>   | III   |
| <b>· Environmental hazards:</b>   | No  |
| <b>· Marine pollutant:</b>  | No  |
| <b>· Special precautions for user</b>   | Warning: Flammable liquids  |
| <b>· Danger code (Kemler):</b>  | 33  |
| <b>· EMS Number:</b>  | F-E, S-D  |
| <b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>    | Not applicable.   |
| <b>· Transport/Additional information:</b>  |   |
| <b>· DOT</b>  |   |
| <b>· Quantity limitations</b>   | On passenger aircraft/rail: 60 L<br>On cargo aircraft only: 220 L |

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· ADR	
· <u>Excepted quantities (EQ)</u>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· <u>Limited quantities (LQ)</u>	5L
· <u>Excepted quantities (EQ)</u>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <u>UN "Model Regulation":</u>	UN1170, Ethanol solutions (Ethyl alcohol solutions), 3, III

## \* 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- Sara

- Section 355 (extremely hazardous substances):

None of the ingredient is listed.

- Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

- TSCA (Toxic Substances Control Act):

All ingredients are listed.

- 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:

64-17-5 | ethanol

- Carcinogenicity categories

- EPA (Environmental Protection Agency)

None of the ingredients is listed.

- TLV (Threshold Limit Value established by ACGIH)

64-17-5 | ethanol

A3

- MAK (German Maximum Workplace Concentration)

64-17-5 | ethanol

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- NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms



GHS02 GHS07 GHS08

- Signal word

Danger

- Hazard-determining components of labeling:

ethanol

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- Hazard statements H226 Flammable liquid and vapour.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H350 May cause cancer.
- 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.  
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P302+P352 If on skin: Wash with plenty of water.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- National regulations:
- Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- VOC USA 692.0 g/l / 5.78 lb/gl
- **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.

- Department issuing SDS: Laboratory
- Contact: Dieter Zimmermann  
Elke Hake  
Fon ++49 (0)911 64296-59  
@mail E.Hake@akemi.de
- Date of preparation / last revision 03/27/2015 / 1
- 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)  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organisation  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)  
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  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
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)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
Flam. Liq. 2: Flammable liquids, Hazard Category 2  
Flam. Liq. 3: Flammable liquids, Hazard Category 3  
: Flammable liquids, Hazard Category 4  
Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A  
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A  
Carc. 1A: Carcinogenicity, Hazard Category 1A  
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
- International Product Registration Status USA (Toxic Substances Control Act, TSCA)