

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/30/2015

Reviewed on 03/30/2015

1 Identification

· Product identifier

· Trade name: **Akelux Retouching Pen**

· Article number: 62030

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

No further relevant information available.

· Application of the substance / the mixture

Dyestuff/Colouring agent

· 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

STOT SE 3 H336 May cause drowsiness or dizziness.

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

Flammable.

· 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.

· 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

· Signal word

Danger

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Trade name: Akelux Retouching Pen (Contd. of page 1)

- Hazard-determining components of labeling: ethanol
1-methoxy-2-propanol
- Hazard statements H226 Flammable liquid and vapour.
H350 May cause cancer.
H336 May cause drowsiness or dizziness.
- 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.
 - P261 Avoid breathing vapours.
 - P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P314 Get medical advice/attention if you feel unwell.
 - 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)



- 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: 107-98-2 EINECS: 203-539-1 Index number: 603-064-00-3	1-methoxy-2-propanol	R10 Flam. Liq. 3, H226 STOT SE 3, H336	50-100%
CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5	ethanol	F R11 Flam. Liq. 2, H225 Carc. 1A, H350	25-50%

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

4 First-aid measures

- **Description of first aid measures**
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.

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- **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.
- **Danger** Danger of impaired breathing.
- **Indication of any immediate medical attention and special treatment needed** 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 fires with water spray or alcohol resistant foam.
- **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.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.
- **Additional information** 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.
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).
- **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.

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7 Handling and storage

- **Precautions for safe handling** Keep receptacles tightly sealed.
Store in cool, dry place in tightly closed receptacles.
Keep away from heat and direct sunlight.
- 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.
Store away from flammable substances.
- Further information about storage conditions: Store receptacle in a well ventilated area.
Keep receptacle tightly sealed.
- **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:

107-98-2 1-methoxy-2-propanol

REL	Short-term value: 540 mg/m ³ , 150 ppm Long-term value: 360 mg/m ³ , 100 ppm
TLV	Short-term value: 369 mg/m ³ , 100 ppm Long-term value: 184 mg/m ³ , 50 ppm

64-17-5 ethanol

PEL	Long-term value: 1900 mg/m ³ , 1000 ppm
REL	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV	Short-term value: 1880 mg/m ³ , 1000 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: Do not eat, drink, smoke or sniff while working.
Use skin protection cream for skin protection.
Wash hands before breaks and at the end of work.
Suitable respiratory protective device recommended.
Filter AX
- Breathing equipment:
- 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

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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
 Recommended thickness of the material: ≥ 0.75 mm
 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.
- Not suitable are gloves made of the following materials: Leather gloves
 Natural rubber, NR
 Strong gloves
- 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: According to product specification
 Odor: Specific type

· Change in condition

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

· Flash point: 23 °C (73 °F)

· Ignition temperature: 270 °C (518 °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: 2.3 Vol %
 Upper: 20.0 Vol %

· Vapor pressure at 20 °C (68 °F): 59 hPa (44 mm Hg)

· Density at 20 °C (68 °F): 0.92 g/cm³ (7.677 lbs/gal)

· Specific gravity at 20 °C (68 °F): 0.9 g/cm³ (7.511 lbs/gal)

· Solubility in / Miscibility with

Water: Fully miscible.

· Viscosity:

Dynamic: Not determined.

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Kinematic at 20 °C (68 °F):	13 s (DIN 53211/4)
· Solvent content:	
Organic solvents:	92.0 %
· Solids content:	8.0 %
· 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** Reacts with acids, alkalis and oxidizing agents.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)

11 Toxicological information

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

- LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimates)

Oral	LD50	7369 mg/kg (rat)
Dermal	LD50	2174 mg/kg
Inhalative	LC50/4 h	75.8 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:

- **Carcinogenic categories**

- IARC (International Agency for Research on Cancer)

64-17-5 ethanol

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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:** Water hazard class 1 (Self-assessment): slightly hazardous for water

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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.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information**UN-Number**

· **DOT, ADR, IMDG, IATA** UN1263

UN proper shipping name

· **DOT** Paint
 · **ADR** 1263 Paint, special provision 640E
 · **IMDG, IATA** PAINT

Transport hazard class(es)

· **DOT**



· **Class** 3 Flammable liquids
 · **Label** 3

· **ADR**



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

· **IMDG, IATA**



· **Class** 3 Flammable liquids
 · **Label** 3

Packing group

· **DOT, ADR, IMDG, IATA** III

Environmental hazards:

· **Marine pollutant:** No

Special precautions for user

· **Warning:** Flammable liquids
 · **Danger code (Kemler):** 30

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· EMS Number:	F-E,S-E
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· <u>Transport/Additional information:</u>	
· DOT	
· <u>Quantity limitations</u>	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
· 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>	UN1263, Paint, special provision 640E, 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).

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· Hazard pictograms

GHS02 GHS07 GHS08

· Signal word

Danger

· Hazard-determining components of labeling:

ethanol
1-methoxy-2-propanol
H226 Flammable liquid and vapour.
H350 May cause cancer.
H336 May cause drowsiness or dizziness.

· Hazard statements· 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.
P261 Avoid breathing vapours.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314 Get medical advice/attention if you feel unwell.
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

846.4 g/l / 7.06 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:

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

· Date of preparation / last revision

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· 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)

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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
Carc. 1A: Carcinogenicity, Hazard Category 1A
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

USA