

# Safety Data Sheet

acc. to OSHA HCS

Printing date 01/22/2014

Reviewed on 01/22/2014

## 1 Identification

### · Product identifier

- Trade name: **Darkener Plus Ink**
- Article number: 11520 / 11521, 11522 / 11523, 11524 / 11525, 11526
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- Application of the substance / the mixture Coating compound/ Surface coating/ paint

### · 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.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.  
STOT SE 3 H336 May cause drowsiness or dizziness.

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

Flammable. Vapours may cause drowsiness and dizziness.

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

### · Classification system:

### · Label elements

#### · Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

#### · Risk phrases:

Flammable.  
Vapours may cause drowsiness and dizziness

#### · Safety phrases:

Keep out of the reach of children.  
Do not breathe vapour/spray.  
Avoid contact with skin.  
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point  
If swallowed, seek medical advice immediately and show this container or label.  
Use only in well-ventilated areas.

(Contd. on page 2)

USA

# Safety Data Sheet

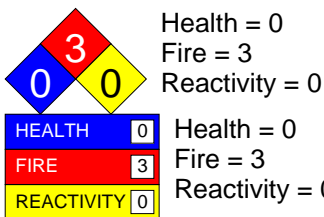
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**Trade name:** Darkener Plus Ink (Contd. of page 1)

- **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.

- Dangerous components:

CAS: 107-98-2 EINECS: 203-539-1 Index number: 603-064-00-3	1-methoxy-2-propanol R10-67 Flam. Liq. 3, H226; STOT SE 3, H336	50-100%
CAS: 61791-14-8	Fatty amine ethoxylate Xn R22; Xi R41; N R51/53 Acute Tox. 3, H301; Eye Dam. 1, H318	1-5%

- 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.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 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** 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.

(Contd. on page 3)

# Safety Data Sheet

## acc. to OSHA HCS

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(Contd. of page 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. Dilute with plenty of 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.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Keep away from heat and direct sunlight. Store in cool, dry place in tightly closed receptacles.
- **Information about protection against explosions and fires:** 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 in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** 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 <sup>3</sup> , 150 ppm Long-term value: 360 mg/m <sup>3</sup> , 100 ppm
TLV	Short-term value: 369 mg/m <sup>3</sup> , 100 ppm Long-term value: 184 mg/m <sup>3</sup> , 50 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:** Wash hands before breaks and at the end of work. The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Not required.
- **Breathing equipment:**
- **Protection of hands:**



Protective gloves

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

(Contd. on page 4)

# Safety Data Sheet

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**Trade name: Darkener Plus Ink**

(Contd. of page 3)

Akemi skin protection agent recommendation for preventive skin shelter without use of protective gloves:

ARRETIL (<http://www.stoko.com>)

Akemi skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:

STOKO EMULSION (<http://www.stoko.com>)

Akemi skin protection recommendation for skin cleaning after product handling:

SOLOPOL (<http://www.stoko.com>)

SLIG SPEZIAL (<http://www.stoko.com>)

Akemi skin protection agent recommendation for skin aftercare:

STOKO VITAN (<http://www.stoko.com>)

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

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.

· Eye protection:



Tightly sealed goggles

### 9 Physical and chemical properties

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

· General Information

· Appearance:

Form: Fluid

Color: According to product specification

· Odor: Characteristic

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 120 °C (248 °F)

· Flash point: 35 °C (95 °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 %

· Vapor pressure at 20 °C (68 °F): 12 hPa (9 mm Hg)

· Density at 20 °C (68 °F): 1.01 g/cm<sup>3</sup> (8.428 lbs/gal)

· Specific gravity at 20 °C (68 °F): 1.01 g/cm<sup>3</sup> (8.428 lbs/gal)

· Solubility in / Miscibility with

Water: Fully miscible.

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

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<u>Viscosity:</u>	
<u>Dynamic:</u>	Not determined.
<u>Kinematic:</u>	Not determined.
<u>Solvent content:</u>	
<u>Organic solvents:</u>	75.8 %
<u>Other information</u>	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** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

\* **11 Toxicological information**

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

<u>IARC (International Agency for Research on Cancer)</u>	None of the ingredients is listed.
<u>NTP (National Toxicology Program)</u>	None of the ingredients is listed.

\* **12 Ecological information**

- **Toxicity**
- Aquatic toxicity:
- 61791-14-8 Fatty amine ethoxylate**
- EC50/48h 9.5 mg/l (daphnia magna)
- LC50/96h 7.5 mg/l (Oncorhynchus mykiss)
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- 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
- **Results of PBT and vPvB assessment**
- PBT: Not applicable.
- vPvB: Not applicable.

(Contd. on page 6)

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· **Other adverse effects** No further relevant information available. (Contd. of page 5)

### 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, solution

· ADR 1263 Paint, solution, special provision 640E

· IMDG, IATA PAINT, solution

· **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

· EMS Number: F-E,S-E

(Contd. on page 7)

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(Contd. of page 6)

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **UN "Model Regulation":** UN1263, Paint, solution, 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):

107-98-2	1-methoxy-2-propanol
61791-14-8	Fatty amine ethoxylate

· 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.

· Cancerogenity categories

· EPA (Environmental Protection Agency)  
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.

· Risk phrases:

Flammable.  
Vapours may cause drowsiness and dizziness

· Safety phrases:

Keep out of the reach of children.  
Do not breathe vapour/spray.  
Avoid contact with skin.  
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point  
If swallowed, seek medical advice immediately and show this container or label.

(Contd. on page 8)

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(Contd. of page 7)

Use only in well-ventilated areas.

- National regulations:
- Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- VOC USA 882.0 g/l / 7.36 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 MSDS: Laboratory
- Contact: Dieter Zimmermann
- Date of preparation / last revision 01/22/2014 / -
- 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 Organization
  - ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (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)

USA