



# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 05.03.2009

Version 3

Revision: 05.03.2009

## 1 Identification of substance:

- **Product details:**
- **Trade name: Clean-OX**
- **Application of the substance / the preparation**  
Cleaning agent/ Cleaner for printing plates  
Reserved for industrial and professional use.
- **Manufacturer/Supplier:**  
ADEFO-CHEMIE GmbH  
Justus-von-Liebig-Str. 24-26  
D-63128 Dietzenbach  
Tel.: +49 6074 84239-0  
Fax: +49 6074 84239-63  
E-Mail: [service@adefo-chemie.de](mailto:service@adefo-chemie.de)  
[www.adefo-chemie.de](http://www.adefo-chemie.de)
- **Informing department:**  
Tel.: +49 6074 84239-0  
Fax: +49 6074 84239-63  
Competent person according to 1907/2006/EC, Annex II:  
E-Mail: [kr@calbe-chemie.de](mailto:kr@calbe-chemie.de)
- **Emergency information:** Tel.: 0700-24112112 (CAL)

## 2 Hazards identification

- **Information pertaining to particular dangers for man and environment**  
R 10 Flammable.
- **Classification system**  
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

## 3 Composition/information on ingredients

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

- **Dangerous components:**

CAS: 107-98-2	1-methoxypropan-2-ol	R 10	75-100%
EINECS: 203-539-1			

## 4 First aid measures

- **General information** Instantly remove any clothing soiled by the product.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact**  
Instantly 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 (> 15 min). Then consult doctor.
- **After swallowing** Do not induce vomiting; instantly call for medical help.

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- **Information for doctor**
- **The following symptoms may occur:**
  - Breathing difficulty
  - Headache
  - Gastric or intestinal trouble
  - Coughing
  - Sickness
  - Dazed
  - Unconsciousness
- **Danger** Danger of impaired breathing.

## 5 Fire fighting measures

- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **Special hazards caused by the material, its products of combustion or resulting gases:**  
Can be released in case of fire  
Carbon monoxide (CO)
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
Wear self-contained breathing apparatus.

## 6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
Do not allow to enter drainage system, surface or ground water.  
Inform respective authorities in case product reaches water or sewage system.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of contaminated material as waste according to item 13.
- **Additional information:**  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

## 7 Handling and storage

- **Handling**
- **Information for safe handling:**  
Keep containers tightly sealed.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.
- **Storage**
- **Requirements to be met by storerooms and containers:**  
Store in cool location.

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- Store only in the original container.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:**
  - Keep container tightly sealed.
  - Protect from heat and direct sunlight.
  - Protect from humidity and keep away from water.
  - This product is hygroscopic.
- **Storage class** LGK 3A (VCI-Concept)

## 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

### 107-98-2 1-methoxypropan-2-ol

WEL	Short-term value: 560 mg/m <sup>3</sup> , 150 ppm Long-term value: 375 mg/m <sup>3</sup> , 100 ppm
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- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
  - Keep away from foodstuffs, beverages and food.
  - Take off immediately all contaminated clothing
  - Wash hands during breaks and at the end of the work.
  - Avoid contact with the eyes and skin.
  - Do not inhale gases / fumes / aerosols.
  - Do not eat, drink or smoke while working.
- **Breathing equipment:**
  - Use breathing protection in case of insufficient ventilation.
  - Filter A/P2.
- **Protection of hands:**
  - Protective gloves.
  - The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374.
  - This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.
  - Only use chemical-protective gloves with CE-labelling of category III.
  - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
  - Butyl rubber, BR
  - Recommended thickness of the material:  $\geq 0.5$  mm
- **Penetration time of glove material**
  - Value for permeation: Level  $\geq 6$  (480 min)
  - 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:**
  - Natural rubber, NR
  - Chloroprene rubber, CR
  - Nitrile rubber, NBR
  - Fluorocarbon rubber (Viton)
- **Eye protection:** Tightly sealed safety glasses.

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- **Body protection:** Solvent resistant protective clothing

### 9 Physical and chemical properties:

#### · General Information

<b>Form:</b>	Liquid
<b>Colour:</b>	Colourless Clear
<b>Odour:</b>	Alcohol-like

#### · Change in condition

<b>Melting point/Melting range:</b>	-95- -100°C
<b>Boiling point/Boiling range:</b>	> 118°C

· **Flash point:** 32°C

· **Ignition temperature:** 270°C

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/steam mixtures is possible.

#### · Critical values for explosion:

<b>Lower:</b>	1.7 Vol %
<b>Upper:</b>	11.5 Vol %

· **Vapour pressure at 20°C:** 10-13 hPa

· **Density at 20°C** 0.920-0.962 g/cm<sup>3</sup>

· **Solubility in / Miscibility with Water:** miscible

· **pH-value at 20°C:** 4

· **Segregation coefficient (n-octanol/water):** -0.437 log POW

#### · Viscosity:

<b>dynamic:</b>	Not determined
<b>kinematic:</b>	Not determined

### 10 Stability and reactivity

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

No decomposition if used according to specifications.

#### · **Dangerous reactions**

Reacts with oxidizing agents  
Reacts with light alloys

· **Dangerous products of decomposition:** Inflammable gases/vapours

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## 11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

**107-98-2 1-methoxypropan-2-ol**

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	13500 mg/kg (rabbit)
Inhalative	LC50/4 h	6 mg/l (rat)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** No irritant effect.
- **Sensitization:** No sensitizing effect known.

## 12 Ecological information:

- **Information about elimination (persistence and degradability):**

- **Other information:** The product is easily biodegradable.

- **Behaviour in environmental systems:**

- **Mobility and bioaccumulation potential:** Not worth-mentioning accumulating in organisms

- **General notes:**

Do not allow product to reach ground water, water bodies or sewage system.  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

## 13 Disposal considerations

- **Product:**

- **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Must be specially treated under adherence to official regulations.

- **European waste catalogue**

07 01 04	other organic solvents, washing liquids and mother liquors
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- **Uncleaned packagings:**

- **Recommendation:**

Disposal must be made according to official regulations.

Non contaminated packagings can be used for recycling.

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

EAK-No. 15 01 10

- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

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### 14 Transport information

· **Land transport ADR/RID (cross-border)**



- **ADR/RID-GGVS/E Class:** 3 Flammable liquids.
- **Kemler Number:** 30
- **UN-Number:** UN 3092
- **Packaging group:** III
- **Label** 3
- **Designation of goods:** 1-METHOXY-2-PROPANOL, solution
- **Remarks:** "Limited quantity" according to chapter 3.4 ADR, if carried in combination packagings with not more than 5 litres per inner packaging and not more than 30 kg litres per package

· **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** UN 3092
- **Label** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-D
- **Marine pollutant:** No
- **Correct technical name:** 1-METHOXY-2-PROPANOL
- **Remarks:** "Limited quantity" according to chapter 3.4 IMDG, if carried in combination packagings with not more than 5 litres per inner packaging and not more than 30 kg per package

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** UN 3092
- **Label** 3
- **Packaging group:** III
- **Correct technical name:** 1-METHOXY-2-PROPANOL
- **Remarks:** Packing Instruction  
PAX 309, CAO 310

### 15 Regulatory information

- **Designation according to EC guidelines:**  
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)
- **Risk phrases:**  
10 Flammable.

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**· Safety phrases:**

24 Avoid contact with skin.

**· National regulations****· Technical instructions (air):**

Class	Share in %
NK	99.0

**· Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.**16 Other information:**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**· Relevant R-phrases**

10 Flammable.

**· Recommended restriction of use** No public product, only for commercial use**· Sources**

applicable EEC directives:

- 1999/45/EC last change 2006/8/EC

- 67/548/EC last change 2004/73/EC (29. ATP)

Internal physical tests, MSDS of the ingredients

**· \* Data compared to the previous version altered.**

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