

# Material Safety Data Sheet

Printing date 10/13/2003

Reviewed on 10/13/2003

1 Identification of substance:

Product details:

C; R 10-35  
EINECS: 200-580-7  
RTECS: AF 1225000

### **3 Hazards identification**

**Emergency overview:**

T Toxic  
F Highly flammable

**Information pertaining to particular dangers for man and environment**

R 11 Highly flammable.  
R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
R 34 Causes burns.  
R 39 Danger of very serious irreversible effects.

**Classification system**

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

**NFPA ratings (scale 0-4)**

Health = 3  
Fire = 3  
Reactivity = 0

### **4 First aid measures**

**General information**

Immediately remove any clothing soiled by the product.  
Remove breathing apparatus only after contaminated clothing have been completely removed.  
In case of irregular breathing or respiratory arrest provide artificial respiration.

**After inhalation**

Supply fresh air or oxygen; call for doctor.  
In case of unconsciousness place patient stably in side position for transportation.

**After skin contact**

Immediately wash with water and soap and rinse thoroughly.

**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.  
Drink copious amounts of water and provide fresh air.  
Immediately call a doctor.

### **5 Fire fighting measures**

**Suitable extinguishing agents**

CO2, extinguishing powder or water spray. Fight larger fires

with water spray or alcohol resistant foam.

**Protective equipment:**

Mount respiratory protective device.

Wear self-contained respiratory protective device.

**6 Accidental release measures**

**Person-related safety precautions:**

Wear protective equipment (See section 8). Keep unprotected persons away.

**Measures for environmental protection:**

Prevent seepage into sewage system, workpits and cellars.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

**Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

**7 Handling and storage**

**Handling**

**Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

No special precautions are necessary if used correctly.

**Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

**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.

Store in cool, dry conditions in well sealed receptacles.

**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:**

67-56-1 methanol

PEL (United States): 260 mg/m<sup>3</sup>, 200 ppm

REL (United States): Short-term value: 325 mg/m<sup>3</sup>, 250 ppm  
Long-term value: 260 mg/m<sup>3</sup>, 200 ppm  
Skin

TLV (United States): Short-term value: 328 mg/m<sup>3</sup>, 250 ppm  
Long-term value: 262 mg/m<sup>3</sup>, 200 ppm  
Skin; BEI

64-19-7 acetic acid, glacial

PEL (United States): 25 mg/m<sup>3</sup>, 10 ppm

REL (United States): Short-term value: 37 mg/m<sup>3</sup>, 15 ppm  
Long-term value: 25 mg/m<sup>3</sup>, 10 ppm

TLV (United States): 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.

; **Personal protective equipment**

; **General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

; **Breathing equipment:**

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:**

Protective gloves.

Synthetic gloves

; **Material of gloves** Synthetic gloves

; **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

; **Eye protection:** Tightly sealed goggles.

; **Melting point/Melting range:** undetermined  
 ; **Boiling point/Boiling range:** 64 ° C  
 ; **Flash point:** <= 21 ° C  
 ; **Ignition temperature:** 455.0 ° C  
 ; **Auto igniting:** Product is not selfigniting.  
 ; **Danger of explosion:**  
 Product does not present an explosion hazard.  
 ; **Explosion limits:**  
 ; **Lower:** 4.0 Vol %  
 ; **Upper:** 44.0 Vol %  
 ; **Vapor pressure:** at 20 ° C 128.0 hPa  
 ; **Density:** Not determined  
 ; **Solubility in / Miscibility with**  
 ; **Water:** Fully miscible  
 ; **pH-value:** at 20 ° C 1.0  
 ; **Solvent content:**  
 ; **Organic solvents:** 35-50 %  
 ; **Water:** 50-100 %  
 ; **Solids content:** 0.1 %

#### 10 Stability and reactivity

; **Thermal decomposition / conditions to be avoided:**  
 No decomposition if used according to specifications.  
 ; **Dangerous reactions** No dangerous reactions known  
 ; **Dangerous products of decomposition:**  
 No dangerous decomposition products known

#### 11 Toxicological information

; **Acute toxicity:**  
LD/LC50 values for hazardous components per OSHA criteria:  
 \_\_\_\_\_  
 67-56-1 methanol  
 Oral: LD50: 5628 mg/kg (rat)  
 Dermal: LD50: 20000 mg/kg (rat)  
 64-19-7 acetic acid, glacial  
 Oral: LD50: 3310 mg/kg (rat)  
 ; **Primary irritant effect:**

- ; **on the skin:** Caustic effect on skin and mucous membranes.
- ; **on the eye:** Strong caustic effect.
- ; **Sensitization:** No sensitizing effects known.
- ; **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Toxic

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

## 12 Ecological information:

### ; **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

## 13 Disposal considerations

### ; **Product:**

### ; **Recommendation**

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

Hand over to hazardous waste disposers.

### ; **Uncleaned packagings:**

### ; **Recommendation:**

Disposal must be made according to official regulations.

### ; **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

### ; **DOT regulations:**

; **Hazard class:** 3

; **Identification number:** UN3286

; **Packing group:** II

### ; **Proper shipping name (technical name):**

n.o.s. Flammable liquid, toxic, corrosive,  
(methanol (Methyl alcohol),  
acetic acid, glacial)

; **Remarks:** ERG 132

; **Land transport ADR/RID (cross-border)**  
 ; **ADR/RID class:** 3 Flammable liquids  
 ; **Item:** 27b  
 ; **Danger code (Kemler):** 368  
 ; **UN-Number:** 3286  
 ; **Label** 3+6.1+8  
 ; **Description of goods:** Flammable liquid, toxic, corrosive,  
 n.o.s.  
 (methanol (Methyl alcohol), acetic  
 acid, glacial)

; **Maritime transport IMDG:**  
 ; **IMDG Class:** 3.2  
 ; **Page:** 3232-1  
 ; **UN Number:** 3286  
 ; **Packing group:** II  
 ; **EMS Number:** F-E,S-C  
 ; **MFAG:** 310  
 ; **Marine pollutant:** No  
 ; **Proper shipping name:** Flammable liquid, toxic, corrosive,  
 n.o.s.  
 (methanol (Methyl alcohol), acetic  
 acid, glacial)

; **Air transport ICAO-TI and IATA-DGR:**  
 ; **ICAO/IATA Class:** 3  
 ; **UN/ID Number:** 3286  
 ; **Packing group:** II  
 ; **Proper shipping name:** Flammable liquid, toxic, corrosive,  
 n.o.s.  
 (methanol (Methyl alcohol), acetic  
 acid, glacial)

### 15 Regulations

; **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

Section 313 (40CFR372.65):

67-56-1 methanol

TSCA (Toxic Substances Control Act):

All ingredients are listed.

; **California Proposition 65:**

Chemicals known to cause cancer:

The product does not contain listed components.

Chemicals known to cause reproductive toxicity:



protection.

45 In case of accident or if you feel unwell, seek medical advice immediately.

60 This material and its container must be disposed of as hazardous waste.

; **National regulations**

Class Share in %

II 10-20

III 20-35

; **Water hazard class:**

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

; **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:** Environmental Health and Safety.

; **Contact:**

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000 1610436