

# E.C. Safety Data Sheet

in accordance with regulation (EC) 1907/2006



Status: 18.08.2009

Version: 1.0

**PLEX® 9021-O**

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## 1. Identification of the Substance/Preparation and of the Company/Undertaking

### PLEX® 9021-O

#### Recommended use(s):

solvent adhesive for PLEXIGLAS®

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## 2. Hazards Identification

Limited evidence of a carcinogenic effect.

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## 3. Composition/Information on Ingredients

Solution of an acrylic polymer in a solvent

#### Hazardous Ingredients

Component	CAS Number	Hazard symbol(s) / R-phrase(s)	Content
dichloromethane	75-09-2	Xn 40	60,0 - 100,0 %
2-phenoxyethanol	122-99-6	Xn 22-36	1,0 - 5,0 %

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## 4. First Aid Measures

#### General information

Remove soiled, soaked clothing immediately. Medical treatment is necessary if symptoms occur which are obviously caused by skin or eye contact with the product or by inhalation of its vapours.

#### After inhalation

Move subject to fresh air and keep him calm. See a physician.

#### After contact with eyes

Keeping the eyelids apart flush thoroughly with water immediately. If irritation persists, contact a physician.

#### After contact with skin

Wash off immediately with soap and water. If skin irritation occurs consult a physician.

#### After Ingestion

Do not induce vomiting. Contact a doctor immediately.

#### Advice to physician

#### Dangers

risk of pulmonary oedema

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### Symptoms

headache  
confusion  
unconsciousness

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## 5. Fire-fighting Measures

### Suitable extinguishing media

foam, dry chemical, carbon dioxide

### Unsuitable extinguishing media for safety reasons

water

### Special protective equipment for fire fighting

Wear self-contained breathing apparatus.

### Special risks posed by the material, its products of combustion or gases formed

In fires, hazardous combustion gases are formed: hydrogen chloride (HCl) Products or compounds possibly released in case of fire: phosgene

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## 6. Accidental Release Measures

### Precautionary measures related to people

Take care for adequate ventilation. Use personal protective clothing. Use breathing apparatus if exposed to vapours/dust/mist/aerosol. Remove persons to safety

### Environmental protective measures

Prevent product from getting into drains/surface water/groundwater.

### Methods of cleaning / adsorption

Larger quantities: Remove mechanically (by pumping). Use explosion-proof equipment! Smaller quantities and/or residues: Contain with absorbent material (e.g. sand, diatomaceous earth, acid absorbent, universal absorbent or sawdust). Dispose of in accordance with regulations.

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## 7. Handling and Storage

### Handling

#### Instructions on safe handling

Keep container tightly closed. Ensure the area is well ventilated.

#### Information on fire and explosion protection

In the event of fire, cool the endangered containers with water.

### Storage

#### Requirements for storage areas and containers

Keep only in the original container at a temperature not exceeding 30 °C. Keep container tightly closed and store in a well ventilated area.

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## 8. Exposure Controls/Personal Protection

### Occupational exposure controls

For monitoring procedures refer to for instance "Empfohlene Analysenverfahren für Arbeitsplatzmessungen", Schriftenreihe der Bundesanstalt für Arbeitsschutz and "NIOSH Manual of Analytical Methods", National Institute for Occupational Safety and Health

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### Personal protective equipment

#### General protective measures

Do not inhale vapours. Avoid contact with eyes and skin. Avoid exposure - Obtain special instructions before use.

#### Hygiene measures

Remove soiled or soaked clothing immediately. Store work clothing separately. Follow the usual good standards of occupational hygiene. Clean skin thoroughly after work; apply skin cream.

#### Respiratory protection

Breathing apparatus in case of high concentrations, short term: filter appliance, filter AX

#### Hand protection

Viton® gloves, Breakthrough time 120 min ( EN 374 )

In practice, due to variable exposure conditions, this information can only be an aid to orientation for the selection of a suitable chemical protection glove. In particular, this information does not substitute suitability tests by the end user.

#### General information

Gloves should be replaced regularly, especially after extended contact with the product. For each work-place a suitable glove type has to be selected.

#### Eye protection

tightly fitting goggles

#### Body protection

on handling of larger quantities: face mask, chemical-resistant boots and apron

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## 9. Physical and Chemical Properties

### Appearance

Form :	liquid, viscous
Colour :	colourless
Odour :	sweetish, chloroform-like

### Data relevant to safety

#### Changes in physical state

Melting temperature	not determined
Boiling Temperature	approx. 40 °C at 1.013 hPa
Flash point	no flash point according to DIN 51755 (dichloromethane)
Ignition temperature	approx. 605 °C ( DIN 51794 ) (dichloromethane)
Lower explosion limit	13 %(V) (dichloromethane)
Upper explosion limit	22 %(V) (dichloromethane)
Vapour pressure	475 hPa at 20 °C (dichloromethane)
Density	1,29 g/cm <sup>3</sup> at 20 °C
Relative vapour density (related to air)	> 1 at 20 °C
Solubility in water	13,7 g/l at 20 °C (dichloromethane)
Fat solubility	not determined
Solubility (qualitative)	miscible with most organic solvents
pH-value	not applicable
n-Octanol/water partition coefficient	not determined

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<b>Viscosity (dynamic)</b>	4.500 - 5.200 mPa.s at 20 °C
<b>Further information</b>	none

### 10. Stability and Reactivity

#### Thermal decomposition

No decomposition when used as directed.

#### Hazardous reactions

Product reacts violently to explosively with alkali metals, alkaline earth metals, various metal powders and sodium amide. Reactions with strong acids. Reactions with strong oxidizing agents.

#### Hazardous decomposition products

In flames and on hot surfaces, poisonous and pungent smelling decomposition products (e.g. hydrogen chloride and phosgene) may form.

### 11. Toxicological Information

#### Acute Oral Toxicity

LD50 rat 1.600 mg/kg

Related to substance: dichloromethane

LD50 rat 1.250 mg/kg

Related to substance: phenoxyethanol

#### Acute Inhalational Toxicity

LC50 rat 52 mg/l

Related to substance: dichloromethane

#### Irritant Effect on the Skin

rabbit highly irritating

Related to substance: dichloromethane

The product has a degreasing effect on skin.

#### Irritant Effect on the Eyes

rabbit irritating

Related to substance: dichloromethane

#### Observations on humans

Possibility of liver damage.

High solvent concentrations will cause irritations of the eyes and respiratory system and may cause headache, dizziness and disorder of the central nervous system.

Inhaling of higher concentrations of solvent vapours causes a narcotic effect.

Related to substance: dichloromethane

#### General information

Carefully avoid contact with skin and eyes as well as inhalation of product vapours.

### 12. Ecological Information

#### Information on elimination (persistence and degradability)

##### Biodegradability

not readily degradable, MITI test, 28 d 5 - 26 %

Related to substance: dichloromethane

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### Ecotoxicological effects

#### Fish toxicity

LC50 Pimephales promelas, flow through, 96 h 193 mg/l

Related to substance: dichloromethane

LC50 Poecilia reticulata, 14 d 294 mg/l

Related to substance: dichloromethane

#### Daphnia toxicity

EC50 Daphnia magna > 200 mg/l

Related to substance: dichloromethane

#### Algae toxicity

EC0 Scenedesmus quadricauda 125 mg/l

Related to substance: dichloromethane

IC50 Selenastrum capricornutum, growth inhibition test, 72 h > 662 mg/l

Related to substance: dichloromethane

#### Bacteria toxicity

NOEC Pseudomonas putida 500 mg/l

Related to substance: dichloromethane

#### General information

Do not allow to enter soil, waterways or waste water

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## 13. Disposal considerations

### Product

Waste is hazardous. It must be disposed of in accordance with the regulations after consultation of the competent local authorities and the disposal company in a suitable and licensed facility.

### Uncleaned packaging

Contaminated packaging should be emptied optimally and after appropriate professional cleansing may be taken for reuse. Packaging that cannot be cleaned should be disposed of professionally. Uncontaminated packaging may be taken for recycling.

### Code of waste EWC

08 04 09

wastes from the manufacture, formulation, supply and use (MFSU) of adhesives and sealants (including waterproofing products) - waste adhesives and sealants containing organic solvents or other dangerous substances

Always check the given waste codes according to the actual conditions of manufacturing, formulation or use in your facilities.

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## 14. Transport Information

### Overland transport ADR/RID/GGVSE

UN 1593 DICHLOROMETHANE, SOLUTION, 6.1, III

Hazard no. 60

### Inland waterway transport ADNR

UN 1593 DICHLOROMETHANE, SOLUTION, 6.1, III

### Shipment by sea IMDG/GGVSee

UN number 1593

Class 6.1

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EmS	F-A, S-A
Marine pollutant	-
Packaging group	III
Proper Shipping Name	DICHLOROMETHANE, SOLUTION

### Air transport ICAO/IATA

UN number	1593
Class	6.1
Packaging group	III
Proper Shipping Name	DICHLOROMETHANE, SOLUTION

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## 15. Regulatory Information

### Labelling in accordance with directive 1999/45/EC

requires labelling

### Hazardous component(s) for labelling

contains dichloromethane

### Hazard symbol(s)

Xn Harmful

### R-phrases(s)

40 Limited evidence of a carcinogenic effect.

### S-phrases(s)

23 Do not breathe vapour/spray.  
24/25 Avoid contact with skin and eyes.  
36/37 Wear suitable protective clothing and gloves.

### Special provisions for certain preparations according to directive 1999/45/EC annex V part B

'Contains methyl methacrylate. May produce an allergic reaction.'

### WGK - Water Hazard Class (Germany) / Wassergefährdungsklasse (Deutschland)

2 ( VwVwS, annex 4 )

### Status of Registration

REACH (EU) preregistered, registered or exempted

### Occupational restrictions

Note for juveniles.  
Note for pregnant woman and nursing mothers (EC Directive 92/85/EEC).

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## 16. Other Information

### Miscellaneous information

none

### R-phrases of relevance from Section 3

22	Harmful if swallowed.
36	Irritating to eyes.
40	Limited evidence of a carcinogenic effect.

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### References

relevant manuals and publications  
own examinations  
own toxicological and ecotoxicological studies  
toxicological and ecotoxicological studies of other manufacturers  
SIAR  
OECD-SIDS  
RTK public files

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Places marked by || have been amended from the last version.

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