# MATERIAL SAFETY DATA SHEET



# METHYLENE CHLORIDE

#### 1 IDENTIFICATION OF THE PRODUCT AND THE COMPANY

#### 1.1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION:

**Trade name:** Dichloromethane

# 1.2 IDENTIFICATION OF THE COMPANY:

RAR Resin & Chemical Industries JLT

11th Floor, Jumeirah Lake Towers, P.O. Box: 47381, Dubai UAE

#### **2 COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical characterization:

CAS No. Description: 75-09-2 Dichloromethane

Indentification number(s)

**EINECS Number:** 200-838-9 **Index Number:** 602-004-00-3

# **3 HAZARDS INDENTIFICATION**

Hazard description:



Xn Harmful

# Information concerning particular hazards for human and environment:

R 40 Limited evidence of a carcinogenic effect.

#### **4 FIRST-AID MEASURES**

**General information:** Take affected persons out of danger area and instruct to lie down.

Immediately remove any clothing contaminated by the product.

Symptoms of poisoning may occur after several hours. Medical observation for at

least 48 hours after the accident is recommended.

**After Inhalation:** Take affected persons into the open air and position comfortably.

Call a doctor immediately.

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. Then consult doctor.

**After swallowing:** Rinse out mouth and then drink plenty of water.

Do not induce vomiting-Danger of chemical pneumonia.

Call a doctor immediately.

#### DISCI AIMER

#### **5 FIRE FIGHTING MEASURES**

**Suitable extinguishing agents:** Product does not burn - take extinguishing measures according to fire conditions.

For safety reasons unsuitable extinguishing agents: Water with a full water jet Special hazards caused by the material, its product of combustion or flue gases:

Formation of poisonous gases during heating or in fires.

Hydrogen chloride (HCI)

Phosgene gas

Chlorine

### **Protective equipment:**

Wear self-contained breathing apparatus.

Wear full protective suit.

### **Additional information**

Cool endangered containers with water spray jet.

Collect contaminated fire fighting water separately. It must not enter drains.

# **6 ACCIDENTAL RELEASE MEASURES**

**Person-related safety precautions:** Wear protective equipment. Keep unprotected person away.

Use breathing protection against the effects of fumes/dust/

aerosol.

**Measures for environmental protection:**Do not allow product to reach sewage or water bodies.

Do not allow to enter the ground/soil.

Inform respective authorities in case product reaches water or

sewage system.

If material reaches soil inform authorities responsible for such

cases.

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.

Ensure adequate ventilation.

### **7 HANDLING AND STORAGE**

Handling:

Information for safe handling: Ensure good interior ventilation, especially

at floor level. (Fumes are heavier than air). Open and handle container with care.

Prevent formation of aerosols. Avoid skin and eye contact.

Make sure that all aplicable workplace limits

are observed.

**Information about fire - and explosion protection:**The product is not flammable.

Protect from heat.

Keep ignition sources away - Do not smoke. Do not spray on flames or red-hot objects.

Storage:

**Requirements to be met by storerooms and containers:**Observe all local and national regulations

for storage of water polluting products.

Store in cool location.

Information about storage in one common storage facility: Do not store together with nitric acid, alkaline

and alkaline earth metals.

Further information about storage conditions: Keep container tightly sealed.

Protect from heat and direct sunlight. Store container in a well ventilated position.

#### DISCLAIMER

#### **8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

Additional information about design of technical systems: No further data; Components with critical values that require monitoring at the workplace: 75-09-2 Dichloromethane

WEL (Great Britain) Short-term value: 1060 mg/m³, 300 ppm

Long-term value: 350 mg/m<sup>3</sup>, 100 ppm

**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.

Do not eat, drink or smoke while working.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Instantly remove any contaminated garments.

Wash hands during breaks and at the end of the work.

#### **Breathing equipment:**

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use exposure use breathing apparatus that is independent of circulating air.

#### Protection of hands:

Solvent resistant gloves.

For the permanent contact no recommendation for a suitable glove material can be given.

# **Material of gloves**

Fluorocarbon rubber (Viton)

Recommended thickness of the material: ≥ 0.4mm

Multi-layer glove - PE/EVAL/PE

(PE = polyethylene; EVAL = ethylene-vinyl alcohol-copolymer)

Gloves made of these materials are suitable only as protection from splashes.

# Not suitable are gloves made of the following materials:

Leather gloves
Natural rubber, NR
Chloroprene rubber, CR
Nitrile rubber, NBR
Butyl rubber, BR
PVC gloves
Textile gloves

**Eye protection:** Tightly sealed safety glasses **Body protection:** Protective work clothing

### 9 PHYSICAL AND CHEMICAL PROPERTIES

# General Information:

Form: Fluid
Colour: Colourless
Odour: Fruit-like

#### DISCLAIMER

#### Change in condition

Melting point / Melting range: -96°C Boiling point / Boiling range: 40°C

Flash point: not applicable

**Ignition temperature:**  $605^{\circ}\text{C}$  **Decomposition temperature:**  $\sim 120^{\circ}\text{C}$ 

**Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor

mixtures are possible.

**Critical values for explosion:** 

Lower: 13 Vol % 22 Vol % Vapour pressure at 20°C: 476 hPa Density at 20°C: 1.3 g/cm³ Solubility in / Miscibility with: 20 g/l

water at 20°C Viscosity:

**Dynamic at 20°C:** 0.43 mPas

#### 10 STABILITY AND REACTIVITY

**Thermal decomposition / conditions to be avoided:** Can be distilled without decomposing at normal pressure **Materials to be avoided:** 

Alkali metals

Earth alkaline metals

Nitric acid

nitric acid, alkaline and earth alkaline metals

# **Dangerous reactions**

Reacts spontaneously with alkaline metals

Reacts with alkaline earth metals

Reactions with nitric acid

Reacts with nitric acid, alkaline and earth alkaline metals.

#### Dangerous products of decomposition:

Hydrogen chloride (HCI)

Phosgen Chlorine

#### 11 TOXICOLOGICAL INFORMATION

Acute toxicity:

LD/LC50 values relevant for classification:
Oral LD50 2136 mg/kg (rat)
Inhalative LC50/4 h 88 mg/l (rat)

Primary irritant effect:

on the skin: Long or repeated contact can defat skin may cause dermatitis.

on the eye: Weak irritating effect

**Sensitization:** No sensitizing effect known. **Additional toxicological information:** 

Carc. Cat. 3: Product causes concern for man owing to possible carcinogenic effects.

### 12 ECOLOGICAL INFORMATION

Information about elimination (persistence and degradability):

**Other information:** The product is slightly biodegradable.

Behaviour in environmental systems:

Mobility and bioaccumulation potential: log P(o/w): 1.25

**Ecotoxical effects:** 

Aquatic toxicity: LC50/EC50/IC50 > 100 mg/l

#### DISCLAIMER

General Notes: Water hazard class 2 (Assessment by list): hazardous for water

Do not allow product to reach ground water, water bodies or sewage system.

Danger to drinking water if even small quantities leak into soil.

#### 13 DISPOSAL CONSIDERATIONS

#### **Product:**

#### Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Contact manufacturer for recycling information.

# European waste catalogue

Waste disposal key numbers from EWC have to be assigned depending on origin and processing.

**Recommendation:** Disposal must be made according to official regulations.

#### 14 TRANSPORT INFORMATION

Land transport ADR / RID (cross-border):



ADR/RID class: 6.1 (T1) Toxic substances.

Kemler Number:60UN-Number:1593Packaging group:IIILabel:6.1

**Description of goods:** 1593 DICHLOROMETHANE

# Maritime transport IMDG/GGV Sea:



IMDG / GGV Sea Class: 6.1
UN Number: 1593
Label: 6.1
Packaging group: III

**EMS Number:** F-A, S-A

Correct technical name: DICHLOROMETHANE

### Air transport ICAO-TI and IATA-DGR:



ICAO / IATA Class: 6.1
UN / ID Number: 1593
Label: 6.1
Packaging group: III

Correct tehcnical name: DICHLOROMETHANE

#### DISCLAIMER

#### 15 REGULATORY INFORMATION

# **Designation according to EC guidelines:**

The product has been classified and marked in accordance with EU Directives / relevant national laws.

### Code letter and hazard designation of product:



Xn Harmful

#### **Risk Phrases:**

40 Limited evidence of a carcinogenic effect.

# Safety phrases:

Keep out of the reach of children.
Do not breathe fumes/aerosols.
Avoid contact with skin and eyes.

36/37 Wear suitable protective clothing and gloves.

### **National regulations**

Water hazard class: Water hazard class 2 (Assessment by list): hazardous for water

Other regulations, limitations and prohibitive regulations

Observe restrictions on the marketing and use according to Directive 76/769/EEC.

#### **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.

# · Department issuing MSDS:

C.S.B. GmbH Phone: +49 - 2151 - 652086-0 Oberstraße 10 Fax: +49 - 2151 - 652086-9

D-47829 Krefeld Germany

· \* Data compared to the previous version altered.