

### 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** Perchloro Ethylene
- **Manufacturer/Supplier:**  
Petrochem Middle East FZE  
PO Box 17028,  
Jebel Ali Free Zone  
Dubai, UAE  
Ph +971 4 8839222; Fax +971 4 8834133
- **Further information obtainable from:** Product safety department.
- **Information in case of Emergency** Product safety department.

### 2 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Description**  
127-18-4 tetrachloroethylene
- **Identification number(s)**
- **EINECS Number:** 204-825-9
- **Index number:** 602-028-00-4

### 3 Hazards identification

- **Hazard description:**



Carc. Cat. 3  
Xn Harmful  
N Dangerous for the environment

- **Information concerning particular hazards for human and environment:**  
R 40 Limited evidence of a carcinogenic effect.  
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 4 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.

### 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:**  
Inform respective authorities in case of seepage into water course or sewage system.  
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).  
Dispose contaminated material as waste according to item 13.

(Contd. on page 2)

**Trade name: Perchloro Ethylene**

Ensure adequate ventilation.

(Contd. of page 1)

### 7 Handling and storage

- **Handling:**
- **Information for safe handling:**
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

### 8 Exposure controls/personal protection

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

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

#### 127-18-4 tetrachloroethylene

|                     |   |
|---------------------|---|
| PEL (USA)           | Short-term value: C 200; 300* ppm<br>Long-term value: 100 ppm<br>*5-min peak in any 3 hrs                   |
| REL (USA)           | LFC (LOQ 0.4 ppm)   |
| TLV (USA)           | Short-term value: 685 mg/m <sup>3</sup> , 100 ppm<br>Long-term value: 170 mg/m <sup>3</sup> , 25 ppm<br>BEI |
| WEL (Great Britain) | Short-term value: 689 mg/m <sup>3</sup> , 100 ppm<br>Long-term value: 345 mg/m <sup>3</sup> , 50 ppm        |

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.
  - Wash hands before breaks and at the end of work.
- **Respiratory protection:**
  - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

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

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.

- **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.

(Contd. on page 3)

**Trade name: Perchloro Ethylene**

(Contd. of page 2)

· **Eye protection:** Goggles recommended during refilling

### 9 Physical and chemical properties

· **General Information**

|                |               |
|----------------|---------------|
| <b>Form:</b>   | Fluid         |
| <b>Colour:</b> | Colourless    |
| <b>Odour:</b>  | Like chlorine |

· **Change in condition**

**Melting point/Melting range:** -23.5°C  
**Boiling point/Boiling range:** 121.1°C

· **Flash point:** Not applicable.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Vapour pressure at 20°C:** 19 hPa

· **Density at 20°C:** 1.6063 g/cm<sup>3</sup>

· **Solubility in / Miscibility with water at 20°C:** 0.4 g/l

### 10 Stability and reactivity

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

### 11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

|      |      |                  |
|------|------|------------------|
| Oral | LD50 | 2629 mg/kg (rat) |
|------|------|------------------|

· **Primary irritant effect:**

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

### 12 Ecological information

· **Ecotoxicological effects:**

· **Remark:** Toxic for fish

· **General notes:**

Water hazard class 3 (German Regulation) (Assessment by list): extremely hazardous for water  
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
 Danger to drinking water if even extremely small quantities leak into the ground.  
 Also poisonous for fish and plankton in water bodies.  
 Toxic for aquatic organisms

UAE

(Contd. on page 4)

**Trade name: Perchloro Ethylene**

(Contd. of page 3)

### 13 Disposal considerations

- **Product:**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

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



- **ADR/RID class:** 6.1 Toxic substances.
- **Danger code (Kemler):** 60
- **UN-Number:** 1897
- **Packaging group:** III
- **Hazard label:** 6.1
- **Special marking:** Symbol (fish and tree)
- **Description of goods:** 1897 TETRACHLOROETHYLENE

· **Maritime transport IMDG:**



- **IMDG Class:** 6.1
- **UN Number:** 1897
- **Label** 6.1
- **Packaging group:** III
- **EMS Number:** F-A,S-A
- **Marine pollutant:** Yes (P)  
Symbol (fish and tree)
- **Proper shipping name:** TETRACHLOROETHYLENE

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



- **ICAO/IATA Class:** 6.1
- **UN/ID Number:** 1897
- **Label** 6.1
- **Special marking:** Symbol (fish and tree)
- **Packaging group:** III
- **Proper shipping name:** TETRACHLOROETHYLENE

- **Environmental hazards:** Environmentally hazardous substance, liquid; Marine Pollutant

UAE

(Contd. on page 5)

**Trade name: Perchloro Ethylene**

(Contd. of page 4)

### 15 Regulatory information

· **Labelling according to EU guidelines:**

*The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.*

· **Code letter and hazard designation of product:**



Carc. Cat. 3

Xn Harmful

N Dangerous for the environment

· **Risk phrases:**

40 Limited evidence of a carcinogenic effect.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Safety phrases:**

2 Keep out of the reach of children.

23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

36/37 Wear suitable protective clothing and gloves.

61 Avoid release to the environment. Refer to special instructions/safety data sheets.

### 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:** Product safety department

· **Contact:** Mr. Menon