

CAS No: 95-47-6  
 RTECS No: ZE2450000  
 UN No: 1307  
 EC No: 601-022-00-9

ortho-Xylene  
 1,2-Dimethylbenzene  
 o-Xylol  
 $C_6H_4(CH_3)_2$  /  $C_8H_{10}$   
 Molecular mass: 106.2

| TYPES OF HAZARD/ EXPOSURE | ACUTE HAZARDS/SYMPTOMS                                  | PREVENTION   | FIRST AID/FIRE FIGHTING   |
|---------------------------|---|--|---|
| <b>FIRE</b>               | Flammable.  | NO open flames, NO sparks, and NO smoking.   | Powder, water spray, foam, carbon dioxide.                      |
| <b>EXPLOSION</b>          | Above 32/C explosive vapour/air mixtures may be formed. | Above 32/C use a closed system, ventilation, and explosion-proof electrical equipment. Prevent build-up of electrostatic charges (e.g., by grounding). | In case of fire: keep drums, etc., cool by spraying with water. |

| EXPOSURE          |  | STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN!  |   |
|-------------------|--|--|---|
| <b>Inhalation</b> | Dizziness. Drowsiness. Headache. Nausea.                     | Ventilation, local exhaust, or breathing protection. | Fresh air, rest. Refer for medical attention.   |
| <b>Skin</b>       | Dry skin. Redness.   | Protective gloves.                                   | Remove contaminated clothes. Rinse and then wash skin with water and soap.  |
| <b>Eyes</b>       | Redness. Pain.   | Safety spectacles.                                   | First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor. |
| <b>Ingestion</b>  | Burning sensation. Abdominal pain. (Further see Inhalation). | Do not eat, drink, or smoke during work.             | Rinse mouth. Do NOT induce vomiting. Refer for medical attention.   |

| SPILLAGE DISPOSAL  | PACKAGING & LABELLING   |
|--|---|
| Ventilation. Remove all ignition sources. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT let this chemical enter the environment. (Extra personal protection: filter respirator for organic gases and vapours.) | <b>EU classification</b><br>Xn Symbol<br>R: 10-20/21-38<br>S: (2-)25<br>Note: C<br><b>UN classification</b><br>UN Hazard Class: 3<br>UN Pack Group: III |

| EMERGENCY RESPONSE  | SAFE STORAGE  |
|---|---|
| Transport Emergency Card: TEC (R)-30S1307-III<br>NFPA Code: H 2; F 3; R 0 | Fireproof. Separated from strong oxidants and strong acids. |

### IMPORTANT DATA

**Physical State; Appearance**

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

**Physical dangers**

As a result of flow, agitation, etc., electrostatic charges can be generated.

**Chemical dangers**

Reacts with strong acids and strong oxidants.

**Occupational exposure limits**

TLV: 100 ppm as TWA; 150 ppm as STEL A4 (ACGIH 2001). BEI specified by (ACGIH 2001).

EU OEL: 50 ppm as TWA; 100 ppm as STEL (skin) (EU 2000).

**Routes of exposure**

The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

**Inhalation risk**

A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20/C.

**Effects of short-term exposure**

The substance is irritating to the eyes and the skin. The substance may cause effects on the central nervous system. If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis.

**Effects of long-term or repeated exposure**

The liquid defats the skin. The substance may have effects on the central nervous system. Exposure to the substance may enhance hearing damage caused by exposure to noise. Animal tests show that this substance possibly causes toxicity to human reproduction or development.

### PHYSICAL PROPERTIES

Boiling point: 144/C

Melting point: -25/C

Relative density (water = 1): 0.88

Solubility in water: none

Vapour pressure, kPa at 20/C: 0.7

Relative vapour density (air = 1): 3.7

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.02

Flash point: 32/C c.c.

Auto-ignition temperature: 463/C

Explosive limits, vol% in air: 0.9-6.7

Octanol/water partition coefficient as log Pow: 3.12

### ENVIRONMENTAL DATA

The substance is toxic to aquatic organisms.

### NOTES

Depending on the degree of exposure, periodic medical examination is indicated.

The recommendations on this Card also apply to technical xylene.

See ICSC 0086 p-Xylene and 0085 m-Xylene.

Card has been partially updated in January 2008: see Occupational Exposure Limits.

### ADDITIONAL INFORMATION

#### LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information