

# TRIMETHYL BENZENE (MIXED ISOMERS)

1389

March 2002

CAS No: 25551-13-7  
RTECS No: DC3220000  
UN No: 1993

Benzene, trimethyl (isomers)  
Methylxylene  
C<sub>9</sub>H<sub>12</sub>  
Molecular mass: 120.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Flammable.	NO open flames, NO sparks, and NO smoking.	Alcohol-resistant foam, dry powder, carbon dioxide.
<b>EXPLOSION</b>	Above 44/C explosive vapour/air mixtures may be formed.	Above 44/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		PREVENT GENERATION OF MISTS!	
<b>Inhalation</b>	Confusion. Cough. Dizziness. Drowsiness. Headache. Sore throat. Vomiting.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
<b>Skin</b>	Redness. Dry skin.	Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
<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>	(See Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
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 wash away into sewer. Do NOT let this chemical enter the environment. Personal protection: filter respirator for organic gases and vapours.	UN Hazard Class: 3 UN Pack Group: III See Notes.

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-30GF1-III NFPA Code: H0; F2; R0	Fireproof. Separated from strong oxidants. Well closed. Keep in a well-ventilated room.

## IMPORTANT DATA

**Physical State; Appearance**

COLOURLESS LIQUID, WITH CHARACTERISITC ODOUR.

**Chemical dangers**

The substance decomposes on burning producing toxic and irritating fumes. Reacts violently with strong oxidants causing fire and explosion hazard.

**Occupational exposure limits**

TLV: (as mixed isomers) 25 ppm as TWA; (ACGIH 2004).

MAK: 20 ppm, 100 mg/m<sup>3</sup>; Peak limitation category: II(2);

Pregnancy risk group: C; (DFG 2004).

EU OEL: 20 ppm, 100 mg/m<sup>3</sup> as TWA (EU 2001).

**Routes of exposure**

The substance can be absorbed into the body by inhalation.

**Inhalation risk**

A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20/C; on spraying or dispersing, however, much faster.

**Effects of short-term exposure**

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

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

The liquid defats the skin. Lungs may be affected by repeated or prolonged exposure, resulting in chronic bronchitis. The substance may have effects on the blood and central nervous system. See Notes.

## PHYSICAL PROPERTIES

Boiling point: 165 to 176/C

Melting point: -25 to 45/C

Relative density (water = 1): 0.86 to 0.89

Solubility in water: very poor

Vapour pressure, kPa at 20/C: 0.18 to 0.25

Relative vapour density (air = 1): 4.1

Flash point: 44 to 53/C (c.c.)

Auto-ignition temperature: 470 to 550/C

Octanol/water partition coefficient as log Pow: 3.4 to 3.8

## ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms. Bioaccumulation of this chemical may occur in fish.

## NOTES

Use of alcoholic beverages enhances the harmful effect.

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

See ICSC 1155 1,2,5-Trimethylbenzene (Mesitylene); ICSC 1362 1,2,3-Trimethylbenzene (Hemimellitene); ICSC 1433

1,2,4-Trimethylbenzene (Pseudocumene).

1,3,5-Trimethylbenzene (Mesitylene) is classified as a marine pollutant. Card has been partly updated in April 2005. See section 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