

p-tert-BUTYLTOLUENE

1068
April 2007

CAS No: 98-51-1
RTECS No: XS8400000
UN No: 2667

1-Methyl-4-tert-butylbenzene
4-tert-Butyltoluene
p-TBT
 $C_{11}H_{16}$ / $CH_3C_6H_4C(CH_3)_3$
Molecular mass: 148.3

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Water spray, alcohol-resistant foam, dry powder, carbon dioxide.
EXPLOSION	Above 63/C explosive vapour/air mixtures may be formed.	Above 63/C use a closed system, ventilation.	
EXPOSURE			
Inhalation	Cough. Sore throat. Metallic taste. Laboured breathing. Nausea. Dizziness. Headache. Tremor. Weakness.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Half-upright position. Refer immediately for medical attention.
Skin	Redness.	Protective gloves.	Rinse and then wash skin with water and soap.
Eyes	Redness. Pain.	Safety spectacles or eye protection in combination with breathing protection.	Rinse with plenty of water (remove contact lenses if easily possible).
Ingestion	Confusion. Convulsions. (See Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Give one or two glasses of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL

Personal protection: self-contained breathing apparatus. Do NOT let this chemical enter the environment. Ventilation. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place.

PACKAGING & LABELLING

UN classification
UN Hazard Class: 6.1
UN Pack Group: III
GHS classification
Signal: Danger
Skull-Health haz
Combustible liquid
Harmful if swallowed
Fatal if inhaled
Causes eye irritation
May cause damage to CNS through prolonged or repeated exposure if inhaled
May cause respiratory irritation
Toxic to aquatic life

Do not transport with food and feedstuffs.
Marine pollutant.

EMERGENCY RESPONSE

Transport Emergency Card: TEC (R)-61S2667 or TEC (R)-61GT1-III

SAFE STORAGE

Separated from food and feedstuffs, strong oxidants. Well closed. Keep in a well-ventilated room. Store in an area without drain or sewer access. Provision to contain effluent from fire extinguishing.

IMPORTANT DATA

Physical State; Appearance

COLOURLESS TO YELLOW LIQUID, WITH CHARACTERISTIC ODOUR.

Physical dangers

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

Chemical dangers

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

Occupational exposure limits

TLV: 1 ppm (as TWA). (ACGIH 2006)

MAK: IIb (not established but data is available). (DFG 2006).

Routes of exposure

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

Inhalation risk

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

Effects of short-term exposure

The substance is irritating to the eyes and the respiratory tract. Exposure far above the OEL could cause lowering of consciousness.

Effects of long-term or repeated exposure

The substance may have effects on the central nervous system, resulting in tissue lesions.

PHYSICAL PROPERTIES

Boiling point at 101.3kPa: 193/C

Melting point: -62.5/C

Relative density (water = 1): 0.86

Solubility in water, g/100 ml at 20/C: (very poor) 0.06

Vapour pressure, Pa at 20/C: 80

Relative vapour density (air = 1): 5.1

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.00

Flash point: 63 /C c.c.

Auto-ignition temperature: 510/C

Explosive limits, vol% in air: 0.7-7.1

Octanol/water partition coefficient as log Pow: 4.35

ENVIRONMENTAL DATA

The substance is toxic to aquatic organisms. Bioaccumulation of this chemical may occur in aquatic organisms. It is strongly advised that this substance does not enter the environment.

NOTES

The odour warning when the exposure limit value is exceeded is insufficient.

Card has been partially updated in January 2008: see GHS classification.

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