

**TETRAMETHYL LEAD****ICSC: 0200**

**Date of Peer  
Review: April  
2005**

Tetramethyl plumbane

<b>CAS #</b>	<b>75-74-1</b>	<b>Pb(CH<sub>3</sub>)<sub>4</sub> / C<sub>4</sub>H<sub>12</sub>Pb</b>
<b>RTECS #</b>	<b>TP4725000</b>	<b>Molecular mass: 267.4</b>
<b>UN #</b>	<b>1649</b>	
<b>EC Annex 1 Index #</b>	<b>082-002-00-1</b>	
<b>EC/EINECS #</b>	<b>200-897-0</b>	

<b>TYPES OF HAZARD / EXPOSURE</b>	<b>ACUTE HAZARDS / SYMPTOMS</b>	<b>PREVENTION</b>	<b>FIRST AID / FIRE FIGHTING</b>
<b>FIRE</b>	Flammable. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking.	Water spray, foam, powder, carbon dioxide.
<b>EXPLOSION</b>	Above 37.8°C explosive vapour/air mixtures may be formed.	Above 37.8°C use a closed system, ventilation, and explosion-proof electrical equipment.	In case of fire: keep drums, etc., cool by spraying with water. Combat fire from a sheltered position.

<b>EXPOSURE</b>		<b>STRICT HYGIENE!</b>	<b>IN ALL CASES CONSULT A DOCTOR!</b>
<b>Inhalation</b>	Convulsions. Dizziness. Headache. Nausea. Unconsciousness. Symptoms may be delayed (see Notes).	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
<b>Skin</b>	<b>MAY BE ABSORBED!</b> (Further see Inhalation).	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
<b>Eyes</b>		Face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>Ingestion</b>	Abdominal pain. Burning sensation. Diarrhoea. Dullness. (Further see Inhalation).	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give a slurry of activated charcoal in water to drink. Refer for medical attention.

**SPILLAGE DISPOSAL****PACKAGING & LABELLING**

<p>Evacuate danger area! Personal protection: complete protective clothing including self-contained breathing apparatus. Consult an expert! 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.</p>	<p>Unbreakable packaging; put breakable packaging into closed unbreakable container. Do not transport with food and feedstuffs. Marine pollutant. Note: A, E, 1  <b>EU Classification</b>  Symbol: T+, N  R: 61-26/27/28-33-62-50/53  S: 53-45-60-61  <b>UN Classification</b>  UN Hazard Class: 6.1  UN Pack Group: I</p>
<p><b>EMERGENCY RESPONSE</b></p>	<p><b>STORAGE</b></p>
<p>Transport Emergency Card: TEC (R)-61S1649  NFPA Code: H 3; F 3; R 3;</p>	<p>Fireproof. Separated from strong oxidants, strong acids, food and feedstuffs. Cool. Well closed. Store in an area without drain or sewer access.</p>
<p><b>IPCS</b>  International Programme on Chemical Safety</p>  <p>Prepared in the context of cooperation between the International Programme on Chemical Safety and the Commission of the European Communities © IPCS, CEC 2005</p> <p><b>SEE IMPORTANT INFORMATION ON BACK</b></p>	

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<p><b>IMPORTANT DATA</b></p>	
<p><b>PHYSICAL STATE; APPEARANCE:</b>  COLOURLESS LIQUID , WITH CHARACTERISTIC ODOUR.</p> <p><b>PHYSICAL DANGERS:</b>  The vapour is heavier than air.</p> <p><b>CHEMICAL DANGERS:</b>  May explode on heating above 90°C. The substance decomposes on burning producing toxic fumes including lead, lead oxides. Reacts violently with strong oxidants. Reacts with strong acids and violently with nitric acid. Attacks rubber.</p> <p><b>OCCUPATIONAL EXPOSURE LIMITS:</b>  TLV: (as lead) 0.15 mg/m<sup>3</sup> as TWA; (skin); (ACGIH 2005).  MAK: 0.05 mg/m<sup>3</sup>; Peak limitation category: II(2); skin absorption (H); Pregnancy risk group: D; (DFG 2004).</p>	<p><b>ROUTES OF EXPOSURE:</b>  The substance can be absorbed into the body by inhalation, through the skin and by ingestion.</p> <p><b>INHALATION RISK:</b>  A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20°C.</p> <p><b>EFFECTS OF SHORT-TERM EXPOSURE:</b>  The substance may cause effects on the central nervous system , resulting in brain disorders. The effects may be delayed. Exposure may result in death. Medical observation is indicated.</p>
<p><b>PHYSICAL PROPERTIES</b></p>	
<p>Boiling point at 1.33 kPa: 110°C  Melting point: -27.5°C  Relative density (water = 1): 2.0  Solubility in water: none  Vapour pressure, kPa at 20°C: 3.0  Relative vapour density (air = 1): 6.5</p>	<p>Relative density of the vapour/air-mixture at 20°C (air = 1): 1.23  Flash point: 37.8°C c.c.  Auto-ignition temperature: 254°C  Explosive limits, vol% in air: 1.8-?  Octanol/water partition coefficient as log Pow: 6.2</p>
<p><b>ENVIRONMENTAL DATA</b></p>	

The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur along the food chain, for example in molluscs and fish.

## **NOTES**

Commercial products are impure, coloured red, orange or blue, with added stabilizer (1,2-dichloroethane, toluene). Depending on the degree of exposure, periodic medical examination is suggested. The relation between odour and the occupational exposure limit cannot be indicated. Do NOT take working clothes home. Card has been partly updated in October 2005. See section EU classification.

## **ADDITIONAL INFORMATION**