

**2,2,4-TRIMETHYLPENTANE****0496**

October 1999

CAS No: 540-84-1  
 RTECS No: SA3320000  
 UN No: 1262  
 EC No: 601-009-00-8

Isooctane  
 Isobutyltrimethylmethane  
 $\text{CH}_3\text{C}(\text{CH}_3)_2\text{CH}_2\text{CH}(\text{CH}_3)_2 / \text{C}_8\text{H}_{18}$   
 Molecular mass: 114.3

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Highly flammable.	NO open flames, NO sparks, and NO smoking.	Powder, AFFF, foam, carbon dioxide.
<b>EXPLOSION</b>	Vapour/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Prevent build-up of electrostatic charges (e.g., by grounding). Do NOT use compressed air for filling, discharging, or handling.	In case of fire: keep drums, etc., cool by spraying with water. Combat fire from a sheltered position.
<b>EXPOSURE</b>			
<b>Inhalation</b>	Confusion. Dizziness. Headache. Nausea. Vomiting.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Artificial respiration may be needed. Refer for medical attention.
<b>Skin</b>	Dry skin. Redness. Pain.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
<b>Eyes</b>	Redness.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>Ingestion</b>	(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**

Evacuate danger area! 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. Personal protection: self-contained breathing apparatus.

F Symbol  
 Xn Symbol  
 N Symbol  
 R: 11-38-50/53-65-67  
 S: (2-)9-16-29-33-60-61-62  
 Note: C  
 UN Hazard Class: 3  
 UN Pack Group: II

**EMERGENCY RESPONSE****SAFE STORAGE**

Transport Emergency Card: TEC (R)-30S1262 or 30GF1-I+II  
 NFPA Code: H 0; F 3; R 0

Fireproof. Separated from strong oxidants. Cool. Keep in a well-ventilated room.

**IPCS**

International  
 Programme on  
 Chemical Safety



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 IPCS 2005

SEE IMPORTANT INFORMATION ON THE BACK.

### IMPORTANT DATA

**Physical State; Appearance**

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

**Physical dangers**

The vapour is heavier than air and may travel along the ground; distant ignition possible. As a result of flow, agitation, etc., electrostatic charges can be generated.

**Chemical dangers**

Heating may cause violent combustion or explosion. Reacts with strong oxidants.

**Occupational exposure limits**

TLV: 300 ppm as TWA; (ACGIH 2004).  
MAK: Carcinogen category: 3A; (DFG 2004).

**Routes of exposure**

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

**Inhalation risk**

No indication can be given about the rate in which a harmful concentration in the air is reached on evaporation of this substance at 20/C.

**Effects of short-term exposure**

The substance irritates the eyes, the skin and the respiratory tract. The substance may cause effects on the kidneys, liver and 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.

### PHYSICAL PROPERTIES

Boiling point: 99/C  
Melting point: -107/C  
Relative density (water = 1): 0.69  
Solubility in water: none  
Vapour pressure, kPa at 20/C: 5.1

Relative vapour density (air = 1): 3.9  
Flash point: 4.5/C o.c.  
Auto-ignition temperature: 417/C  
Explosive limits, vol% in air: 1.1-6.0

### ENVIRONMENTAL DATA

### NOTES

Card has been partly updated in October 2005. See sections Occupational Exposure Limits, Emergency Response.

### ADDITIONAL INFORMATION

**LEGAL NOTICE**

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