

5-METHYL-3-HEPTANONE**1391**

March 2001

CAS No: 541-85-5
 RTECS No: MJ7350000
 UN No: 2271
 EC No: 606-020-00-1

5-Methyl heptan-3-one
 3-Heptanone, 5-methyl
 Ethyl amyl ketone
 Ethyl sec-amyl ketone
 $C_8H_{16}O$
 Molecular mass: 128.24

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Flammable.	NO open flames, NO sparks, and NO smoking.	Water spray, powder, AFFF, foam, carbon dioxide.
EXPLOSION	Above 43/C explosive vapour/air mixtures may be formed.	Above 43/C use a closed system, ventilation, and explosion-proof electrical equipment.	In case of fire: keep cylinder cool by spraying with water.

EXPOSURE			
Inhalation	Cough. Dizziness. Headache. Nausea. Sore throat.	Ventilation, local exhaust, and breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Dry skin. Redness.	Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
Eyes	Redness. Pain.	Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Vomiting. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Give plenty of water to drink. 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 wash away into sewer. Personal protection: filter respirator for organic gases and vapours.	Xi Symbol R: 10-36/37 S: (2-)23 UN Hazard Class: 3 UN Pack Group: III

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-30S2271 or 30GF1-III	Fireproof. Separated from strong oxidants, strong bases, strong reducing agents. Well closed.

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.

Chemical dangers

Reacts with oxidants and strong reducing agents and strong bases causing fire hazard.

Occupational exposure limits

TLV: 25 ppm as TWA; (ACGIH 2004).
 MAK: 10 ppm, 53 mg/m³; Peak limitation category: I(2);
 Pregnancy risk group: IIc; (DFG 2004).
 EU OEL: 10 ppm, 53 mg/m³ as TWA; 20 ppm, 107 mg/m³ as STEL.

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.

Effects of short-term exposure

The substance is irritating to the eyes, the skin and the respiratory tract. The substance may cause effects on the central nervous system. Exposure far above the OEL may result in unconsciousness.

Effects of long-term or repeated exposure

The liquid defats the skin.

PHYSICAL PROPERTIES

Boiling point: 157-162/C
 Melting point: -56.7/C
 Relative density (water = 1): 0.82
 Solubility in water, g/100 ml at 20/C: 0.3

Vapour pressure, kPa at 25/C: 0.267
 Relative vapour density (air = 1): 4.4
 Relative density of the vapour/air-mixture at 20/C (air = 1): 1.0
 Flash point: 43/C c.c., 57.2/C o.c.

ENVIRONMENTAL DATA

NOTES

Explosive limits are unknown in literature, although the substance is flammable and has a flash point <61/C.
 The odour warning when the exposure limit value is exceeded is insufficient.
 Card has been partly updated in April 2005. See sections Occupational Exposure Limits, Emergency Response.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible