

ISOPHORONE**0169**
April 2000

CAS No: 78-59-1
RTECS No: GW7700000
EC No: 606-012-00-8

1,1,3-Trimethyl-3-cyclohexene-5-one
3,5,5-Trimethylcyclohex-2-enone
Isoacetophorone
C₉H₁₄O
Molecular mass: 138.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Powder, water spray, foam, carbon dioxide.
EXPLOSION	Above 84/C explosive vapour/air mixtures may be formed.	Above 84/C use a closed system, ventilation.	

EXPOSURE		PREVENT GENERATION OF MISTS!	
Inhalation	Burning sensation. Sore throat. Cough. Dizziness. Headache. Nausea. Shortness of breath.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Artificial respiration may be needed. Refer for medical attention.
Skin		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness. Pain. Blurred vision.	Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Abdominal pain. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Give a slurry of activated charcoal in water to drink. Do NOT induce vomiting.

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. Personal protection: filter respirator for organic gases and vapours.	Xn Symbol R: 21/22-36/37-40 S: (2-)13-23-36/37/39-46

EMERGENCY RESPONSE	SAFE STORAGE
NFPA Code: H 2; F 2; R 0	Separated from strong oxidants, strong bases, amines.

IMPORTANT DATA

Physical State; Appearance

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

Chemical dangers

Reacts with strong oxidants, strong bases and amines.

Occupational exposure limits

TLV: 5 ppm; (Ceiling value); A3 (confirmed animal carcinogen with unknown relevance to humans); (ACGIH 2004).
MAK: 2 ppm, 11 mg/m³; Peak limitation category: I(2);
Carcinogen category: 3B; Pregnancy risk group: C; (DFG 2004).

Routes of exposure

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

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 and the vapour of this substance is irritating to the eyes and the respiratory tract. The substance may cause effects on the central nervous system.

PHYSICAL PROPERTIES

Boiling point: 215/C

Melting point: -8/C

Relative density (water = 1): 0.92

Solubility in water, g/100 ml at 25/C: 1.2

Vapour pressure, Pa at 20/C: 40

Relative vapour density (air = 1): 4.8

Flash point: 84/C c.c.

Auto-ignition temperature: 460/C

Explosive limits, vol% in air: 0.8-3.8

Octanol/water partition coefficient as log Pow: 1.67

ENVIRONMENTAL DATA

NOTES

The occupational exposure limit value should not be exceeded during any part of the working exposure.

Card has been partly updated in April 2005. See sections Occupational Exposure Limits, EU classification, 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