

OCTANE

0933

October 1997

CAS No: 111-65-9
 RTECS No: RG8400000
 UN No: 1262
 EC No: 601-009-00-8

n-Octane
 C_8H_{18} / $CH_3-(CH_2)_6-CH_3$
 Molecular mass: 114.22

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Highly flammable.	NO open flames, NO sparks, and NO smoking.	Powder, AFFF, foam, carbon dioxide.
EXPLOSION	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. Use non-sparking handtools.	In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE		STRICT HYGIENE!	
Inhalation	Confusion. Cough. Dizziness. Drowsiness. Headache. Laboured breathing. Nausea. Sore throat. Unconsciousness.	Ventilation.	Fresh air, rest. Refer for medical attention.
Skin	Dry skin. Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
Eyes	Redness. Pain.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Vomiting. (See Inhalation).	Do not eat, drink, or smoke during work.	Do NOT induce vomiting. Give nothing to drink. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Evacuate danger area! Ventilation. 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. Do NOT let this chemical enter the environment. 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 NFPA Code: H0; F3; R0	Fireproof. Separated from strong oxidants. Cool. Ventilation along the floor.

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

Reacts with strong oxidants causing fire and explosion hazard. Attacks some forms of plastics, rubber and coatings.

Occupational exposure limits

TLV: 300 ppm as TWA; (ACGIH 2004).
MAK: 500 ppm, 2400 mg/m³; Peak limitation category: II(2);
Pregnancy risk group: IIc; (DFG 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation 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 is irritating to the eyes, the skin and the respiratory tract. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. Exposure to high concentrations of vapour could cause lowering of consciousness.

Effects of long-term or repeated exposure

Repeated or prolonged contact with skin may cause dermatitis. The liquid defats the skin.

PHYSICAL PROPERTIES

Boiling point: 126/C
Melting point: -56.8/C
Relative density (water = 1): 0.70
Solubility in water: none
Vapour pressure, kPa at 20/C: 1.33

Relative vapour density (air = 1): 3.94
Flash point: 13/C c.c.
Auto-ignition temperature: 220/C
Explosive limits, vol% in air: 1.0-6.5
Octanol/water partition coefficient as log Pow: 4.00-5.18

ENVIRONMENTAL DATA

This substance may be hazardous to the environment; special attention should be given to aquatic organisms.

NOTES

Card has been partly updated in October 2004. 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