IPCS INCHEM Home

1-HEXENE **ICSC: 0490 (October 2004)**

Butyl ethylene
Hexylene
Hex-1-ene

CAS #: 592-41-6
UN #: 2370
EC Number: 209-753-1

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Extremely flammable. Vapour/air mixtures are explosive.	NO open flames, NO sparks and NO smoking. Closed system, ventilation, explosion-proof electrical equipment and lighting. Do NOT use compressed air for filling, discharging, or handling.	Use foam, dry powder, carbon dioxide. In case of fire: keep drums, etc., cool by spraying with water.

	SYMPTOMS	PREVENTION	FIRST AID
Inhalation	Cough. Dizziness. Drowsiness. Sore throat. Vomiting. Unconsciousness.	Use ventilation, local exhaust or breathing protection.	Fresh air, rest.
Skin	Dry skin.	Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
Eyes	Redness.	Wear safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
Ingestion	See Inhalation.	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention .

SPILLAGE DISPOSAL

Evacuate danger area! Consult an expert! Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Remove all ignition sources. Do NOT wash away into sewer. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

STORAGE

Fireproof. Separated from oxidants. Cool. Store in an area without drain or sewer access.

PACKAGING

CLASSIFICATION & LABELLING

According to UN GHS Criteria

Transportation
UN Classification
UN Hazard Class: 3; UN Pack Group: II

International Labour Organization
World Health Organization

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

European Commission

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PHYSICAL & CHEMICAL INFORMATION

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. The vapour is heavier than air and may accumulate in lowered spaces causing a deficiency of oxygen.

Chemical dangers
Reacts violently with oxidants. This generates fire and explosion hazard.

Formula: C_6H_{12} / CH_2=$CH(CH_2)_3CH_3$
Molecular mass: 84.2
Boiling point: 63°C
Melting point: -140°C
Relative density (water = 1): 0.7
Solubility in water, g/100ml at 20°C: 0.005
Vapour pressure, kPa at 20°C: 18.7
Relative vapour density (air = 1): 2.9
Relative density of the vapour/air-mixture at 20°C (air = 1): 1.4
Flash point: -26°C c.c.
Auto-ignition temperature: 253°C
Explosive limits, vol% in air: 1.2-6.9
Octanol/water partition coefficient as log Pow: 3.39

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation of its vapour.

Effects of short-term exposure
The substance is mildly irritating to the eyes and respiratory tract. If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis. Exposure at high levels could cause lowering of consciousness.

Inhalation risk
A harmful contamination of the air can be reached rather quickly on evaporation of this substance at 20°C.

Effects of long-term or repeated exposure
The substance defats the skin, which may cause dryness or cracking.

OCCUPATIONAL EXPOSURE LIMITS

TLV: 50 ppm as TWA

ENVIRONMENT

The substance is toxic to aquatic organisms.

NOTES

High concentrations in the air cause a deficiency of oxygen with the risk of unconsciousness or death.
Check oxygen content before entering area.

ADDITIONAL INFORMATION

EC Classification

See Also:
Toxicological Abbreviations