

# CYCLOHEXANE

0242  
April 1994

CAS No: 110-82-7  
RTECS No: GU6300000  
UN No: 1145  
EC No: 601-017-00-1

Hexahydrobenzene  
Hexamethylene  
Hexanaphthene  
C<sub>6</sub>H<sub>12</sub>  
Molecular mass: 84.2

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. Do NOT use compressed air for filling, discharging, or handling. Use non-sparking handtools. Prevent build-up of electrostatic charges (e.g., by grounding).	In case of fire: keep drums, etc., cool by spraying with water.
<b>EXPOSURE</b>			
<b>Inhalation</b>	Dizziness. Headache. Nausea.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
<b>Skin</b>	Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
<b>Eyes</b>	Redness.	Safety goggles or face shield.	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. Give a slurry of activated charcoal in water to drink. Do NOT induce vomiting. Refer for medical attention.

## SPILLAGE DISPOSAL

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

## PACKAGING & LABELLING

F Symbol  
Xn Symbol  
N Symbol  
R: 11-38-65-67-50/53  
S: (2-)9-16-25-33-60-61-62  
UN Hazard Class: 3  
UN Pack Group: II

## EMERGENCY RESPONSE

Transport Emergency Card: TEC (R)-30S1145 or 30GF1-I+II  
NFPA Code: H 1; F 3; R 0

## SAFE STORAGE

Fireproof.

**IPCS**

International  
Programme on  
Chemical Safety



Prepared in the context of cooperation between the International Programme on Chemical Safety and the European Commission ©  
IPCS 2005

SEE IMPORTANT INFORMATION ON THE BACK.

### IMPORTANT DATA

**Physical State; Appearance**

COLOURLESS LIQUID.

**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.

**Occupational exposure limits**

TLV: 100 ppm as TWA; (ACGIH 2004).  
MAK: 200 ppm, 700 mg/m<sup>3</sup>; Peak limitation category: II(4);  
Pregnancy risk group: IIc; (DFG 2004).

**Routes of exposure**

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

**Inhalation risk**

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

**Effects of short-term exposure**

The substance and the vapour in high concentrations irritates the eyes and the respiratory tract. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. Exposure far above the OEL may result in unconsciousness.

**Effects of long-term or repeated exposure**

Repeated or prolonged contact with skin may cause dermatitis.

### PHYSICAL PROPERTIES

Boiling point: 81/C  
Melting point: 7/C  
Relative density (water = 1): 0.8  
Solubility in water: none  
Vapour pressure, kPa at 20/C: 12.7  
Relative vapour density (air = 1): 2.9

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.2  
Flash point: -18/C c.c.  
Auto-ignition temperature: 260/C  
Explosive limits, vol% in air: 1.3-8.4  
Octanol/water partition coefficient as log Pow: 3.4

### ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms.

### NOTES

The odour warning when the exposure limit value is exceeded is insufficient.  
Card has been partly updated in October 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 for the use which might be made of this information