

ETHYLBENZENE

0268

November 2007

CAS No: 100-41-4
 RTECS No: DA0700000
 UN No: 1175
 EC No: 601-023-00-4

Ethylbenzol
 Phenylethane
 EB
 $C_8H_{10}/C_6H_5C_2H_5$
 Molecular mass: 106.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Highly flammable.	NO open flames, NO sparks, and NO smoking.	Dry powder. Foam. Carbon dioxide.
EXPLOSION	Vapour/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Do NOT use compressed air for filling, discharging or handling.	In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE		PREVENT GENERATION OF MISTS!	
Inhalation	Cough. Sore throat. Dizziness. Drowsiness. Headache.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
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	Burning sensation in the throat and chest. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Ventilation. Collect leaking liquid in covered containers. 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.	EU classification F Symbol Xn Symbol R: 11-20 S: (2-)-16-24/25-29 UN classification UN Hazard Class: 3 UN Pack Group: II GHS classification Signal: Danger Flame-Excl mark-Health haz Highly flammable liquid and vapour May be harmful if swallowed Harmful if inhaled vapour Causes mild skin irritation Causes eye irritation Suspected of causing cancer May cause respiratory irritation May cause drowsiness or dizziness May be harmful if swallowed and enters airways Toxic to aquatic life

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-305 1135 or 30GF1- I-II NFPA Code: H2; F3; R0	Fireproof. Separated from strong oxidants. Provision to contain effluent from fire extinguishing. Store in an area without drain or sewer access.



IMPORTANT DATA

Physical State; Appearance

COLOURLESS LIQUID, WITH AROMATIC ODOUR.

Physical dangers

The vapour mixes well with air, explosive mixtures are easily formed.

Chemical dangers

Reacts with strong oxidants. Attacks plastic and rubber.

Occupational exposure limits

TLV: 100 ppm as TWA, 125 ppm as STEL; A3 (confirmed animal carcinogen with unknown relevance to humans); BEI issued, (ACGIH 2007).

MAK: skin absorption (H); Carcinogen category: 3A (DFG 2006).

EU OEL: 442 mg/m³ 100 ppm as TWA 884 mg/m³ 200 ppm as STEL (skin) (EU 2006).

Routes of exposure

The substance can be absorbed into the body by inhalation of its vapour, 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. The substance may cause effects on the central nervous system. Exposure above the OEL could cause lowering of consciousness.

Effects of long-term or repeated exposure

This substance is possibly carcinogenic to humans. The substance may have effects on the kidneys and liver, resulting in impaired functions. Repeated contact with skin may cause dryness and cracking.

PHYSICAL PROPERTIES

Boiling point: 136/C

Melting point: -95/C

Relative density (water = 1): 0.9

Solubility in water, g/100 ml at 20/C: 0.015

Vapour pressure, kPa at 20/C: 1.24

Relative vapour density (air = 1): 3.7

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.02

Flash point: 18/C c.c.

Auto-ignition temperature: 432/C

Explosive limits, vol% in air: 1.0-6.7

Octanol/water partition coefficient as log Pow: 3.1

ENVIRONMENTAL DATA

The substance is toxic to aquatic organisms. It is strongly advised that this substance does not enter the environment.

NOTES

The odour warning when the exposure limit value is exceeded is insufficient.

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