

STYRENE OXIDE

1201
April 2006

CAS No: 96-09-3
RTECS No: CZ9625000
EC No: 603-084-00-2

(Epoxyethyl)benzene
1,2-Epoxyethylbenzene
Styrene-7,8-oxide
Phenylethylene oxide
Phenyl oxirane
Styrene epoxide
Styryl oxide
C₈H₈O / C₆H₅CHCH₂O
Molecular mass: 120.2

| TYPES OF HAZARD/ EXPOSURE | ACUTE HAZARDS/SYMPTOMS | PREVENTION | FIRST AID/FIRE FIGHTING |
|---------------------------|---|---|--|
| FIRE | Combustible. | NO open flames. NO contact with acid(s), base(s). | Powder, foam, carbon dioxide |
| EXPLOSION | Above 76/C explosive vapour/air mixtures may be formed. | Above 76/C use a closed system, ventilation. | In case of fire: cool drums, etc., by spraying with water but avoid contact of the substance with water. |

| EXPOSURE | AVOID ALL CONTACT! | | |
|-------------------|---|--|---|
| Inhalation | Dizziness. Drowsiness. Unconsciousness. Vomiting. | Local exhaust or breathing protection. | Fresh air, rest. |
| Skin | Redness. Pain. | Protective clothing. Protective gloves. | Remove contaminated clothes. Rinse and then wash skin with water and soap. |
| Eyes | Redness. Pain. | Safety goggles or eye protection in combination with breathing protection. | 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. Wash hands before eating. | Rinse mouth. Refer for medical attention. |

| SPILLAGE DISPOSAL | PACKAGING & LABELLING |
|--|---|
| Personal protection: chemical protection suit including self-contained breathing apparatus. Collect leaking liquid in covered containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place. | <p>EU classification</p> <p>T Symbol R: 45-21-36 S: 53-45</p> <p>GHS classification</p> <p>Signal: Danger Excl mark-Health haz Combustible liquid Harmful if swallowed Causes skin irritation Causes eye irritation Suspected of causing genetic defects May cause Note: E cancer</p> <p>Do not transport with food and feedstuffs.</p> |

| EMERGENCY RESPONSE | SAFE STORAGE |
|-----------------------|--|
| NFPA Code: H2; F2; R0 | Separated from acids, bases, food and feedstuffs. Ventilation along the floor. |

IMPORTANT DATA

Physical State; Appearance

COLOURLESS TO PALE YELLOW LIQUID.

Chemical dangers

The substance may polymerize due to heating above the flash point, under the influence of acid(s) and base(s).

Occupational exposure limits

TLV not established.
MAK not established.

Routes of exposure

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

Inhalation risk

No indication can be given about the rate in which a harmful concentration in the air is reached on evaporation of this substance at 20/C.

Effects of short-term exposure

The substance irritates the eyes and the skin. The substance may cause effects on the central nervous system. Exposure could cause lowering of consciousness.

Effects of long-term or repeated exposure

This substance is probably carcinogenic to humans.

PHYSICAL PROPERTIES

Boiling point: 194/C

Melting point: -36.7/C

Relative density (water = 1): 1.05

Solubility in water, g/100 ml at 25/C: 0.3 (poor)

Vapour pressure, Pa at 20/C: 40

Relative vapour density (air = 1): 4.30

Relative density of the vapour/air-mixture at 20/C (air = 1): 1.001

Flash point: 76/C c.c.

Auto-ignition temperature: 498/C

Explosive limits, vol% in air: 1.1-22

Octanol/water partition coefficient as log Pow: 1.61

ENVIRONMENTAL DATA

NOTES

Do NOT take working clothes home.

Card has been partially updated in January 2008: see Fire fighting.

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