

CHLOROPRENE

0133

March 1998

CAS No: 126-99-8
RTECS No: EI9625000
UN No: 1991 (inhibited)
EC No: 602-036-00-8

2-Chloro-1,3-butadiene
2-Chlorobutadiene
beta-Chloroprene
 $C_4H_5Cl / CH_2=CClCH=CH_2$
Molecular mass: 88.5

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Highly flammable. Many reactions may cause fire or explosion. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking.	Powder, water spray, 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). Use non-sparking handtools.	In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE		PREVENT GENERATION OF MISTS! STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN!	IN ALL CASES CONSULT A DOCTOR!
Inhalation	Cough. Dizziness. Drowsiness. Headache. Sore throat. Unconsciousness. Chest pain.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	MAY BE ABSORBED! Redness. Pain.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
Eyes	Redness. Pain. Corneal damage.	Safety goggles, face shield, 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	Nausea. (See Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING	
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: complete protective clothing including self-contained breathing apparatus.	F Symbol T Symbol R: 45-11-20/22-36/37/38-48/20 S: 53-45 Note: D, E UN Hazard Class: 3 UN Subsidiary Risks: 6.1 UN Pack Group: I	Airtight. Unbreakable packaging; put breakable packaging into closed unbreakable container. Do not transport with food and feedstuffs. Marine pollutant.

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-30S1991 NFPA Code: H2; F3; R0	Fireproof. Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs, and incompatible materials. See Chemical Dangers. Cool. Keep in the dark. Well closed. Store only if stabilized.

IMPORTANT DATA

Physical State; Appearance

COLOURLESS LIQUID, WITH PUNGENT 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

The substance can under specific circumstances readily form peroxides, initiating explosive polymerization. The substance may polymerize on standing with fire or explosion hazard. On combustion, forms toxic and corrosive gases including phosgene and hydrogen chloride (see ICSC 0007 and ICSC 0163). Reacts with oxidants, alkali metals and some powdered metals causing fire and explosion hazard.

Occupational exposure limits

TLV: 10 ppm as TWA; (skin); (ACGIH 2004).
MAK: H; Carcinogen category: 2; (DFG 2004).

Routes of exposure

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

Inhalation risk

A harmful contamination of the air can be reached very quickly 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. The substance may cause effects on the central nervous system, kidneys and liver. Exposure far above OEL may result in death. Medical observation is indicated.

Effects of long-term or repeated exposure

Repeated or prolonged contact with skin may cause dermatitis. Chronic exposure may cause alopecia. This substance is possibly carcinogenic to humans.

PHYSICAL PROPERTIES

Boiling point: 59.4°C

Melting point: -130°C

Relative density (water = 1): 0.96

Solubility in water, g/100 ml at 20°C: 0.026

Vapour pressure, kPa at 20°C: 23.2

Relative vapour density (air = 1): 3.0

Relative density of the vapour/air-mixture at 20°C (air = 1): 1.57

Flash point: -20°C o.c.

Explosive limits, vol% in air: 4-20

Octanol/water partition coefficient as log Pow: 2.1

ENVIRONMENTAL DATA

This substance may be hazardous to the environment; special attention should be given to water. It is strongly advised not to let the chemical enter into the environment because it persists in the environment.

NOTES

Depending on the degree of exposure, periodic medical examination is suggested.

An added stabilizer or inhibitor can influence the toxicological properties of this substance, consult an expert.

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

Do NOT use in the vicinity of a fire or a hot surface, or during welding.

Check for peroxides prior to distillation; eliminate if found.

Inhibitors such as hydroquinone or phenothiazine are generally added when it is to be stored.

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