

化 学 品 安 全 技 术 说 明 书

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MSDS标题

VINYL CYCLOHEXENE MONOXIDE MSDS报告

产品标题

1, 2-环氧-4-乙烯环己烷; 3-乙烯基-7-氧杂二环[4, 1, 0]庚烷; 4-乙烯基-1, 2-环氧环己烷

CAS号

106-86-5

化学品及企业标识

PRODUCT NAME

VINYL CYCLOHEXENE MONOXIDE

NFPA

Flammability	2
Toxicity	2
Body Contact	2
Reactivity	2
Chronic	0
SCALE: Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4	

PRODUCT USE

Intermediate in the synthesis of polymers.

SYNONYMS

C8-H12-O2, CH₂=CHC₆H₉O, "7-oxabicyclo(4.1.0)heptane, 3-vinyl-", "7-oxabicyclo(4.1.0)heptane, 3-vinyl-", "1, 2-epoxy-4-vinylcyclohexane", "1, 2-epoxy-4-vinylcyclohexane", "4-vinylcyclohexane, 1, 2-epoxide", "4-vinylcyclohexane, 1, 2-epoxide", "vinylcyclohexane monoxide", "vinylcyclohexene monoxide", "4-vinylcyclohexene-1, 2-epoxide", "4-vinylcyclohexene-1, 2-epoxide", "4-vinylcyclohexene monoxide", "4-vinylcyclohexene monoxide", "1-vinyl-3, 4-epoxycyclohexane", "1-vinyl-3, 4-epoxycyclohexane", 3-vinyl-7-oxabicyclo(4.1.0)heptane, 3-vinyl-7-oxabicyclo(4.1.0)heptane, EP-101, "Epoxide 101", "Unoxat Epoxide 101"

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

May form explosive peroxides.

Harmful if swallowed.

Flammable.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. Considered an unlikely route of entry in commercial/industrial environments. Ingestion may result in nausea, pain, vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

EYE

Although the material is not thought to be an irritant, direct contact with the eye may produce transient discomfort characterized by tearing or conjunctival redness (as with windburn). The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation. The vapour when concentrated has pronounced eye irritation effects and this gives some warning of high vapour concentrations. If eye irritation occurs seek to reduce exposure with available control measures, or evacuate area. The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. The liquid may produce skin discomfort following prolonged contact. Defatting and/or drying of the skin may lead to dermatitis. Toxic effects may result from skin absorption. Bare unprotected skin should not be exposed to this material. The material may accentuate any pre-existing skin condition. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

INHALED

Inhalation may produce health damage*. The material is not thought to produce respiratory irritation (as classified using animal models). Nevertheless inhalation of the material, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress. Inhalation hazard is increased at higher temperatures. Acute effects from inhalation of high vapor concentrations may be chest and nasal irritation with coughing, sneezing, headache and even nausea. If exposure to highly concentrated vapor atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and unless resuscitated - death. Inhalation of vapor may aggravate a pre-existing respiratory condition.

CHRONIC HEALTH EFFECTS

Principal routes of exposure are usually by skin contact/absorption and inhalation of vapor. An earlier concern related to the carcinogenic potential of mixtures of diglycidyl ether of bisphenol A (DGEBA) and cycloaliphatic epoxides raises the question as to whether occupational exposure to vinylcyclohexene monoxide might produce skin cancers. Current data indicates concerns should be restricted to one particular epoxide, bis(epoxycyclopentyl ether) and that other cycloaliphatic epoxides do not produce these effects either alone or in admixture with DGEBA. Vinyl cyclohexene monoxide exhibits weak mutagenic activity in several in vitro systems. Carcinogenicity was not evident in lifetime skin painting studies. [Union Carbide]