

化 学 品 安 全 技 术 说 明 书

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MSDS标题

M-TETRAMETHYLXYLENE DIISOCYANATE MSDS报告

产品标题

A,A,A',A'-四甲基-1, 3-苯二甲基二异氰酸酯

CAS号

2778-42-9

化学品及企业标识

PRODUCT NAME

M-TETRAMETHYLXYLENE DIISOCYANATE

NFPA

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

PRODUCT USE

Monomer.

SYNONYMS

C14-H16-N2-O2, C6H4[C(CH3)2NCO]2, "1, 3-bis(1-isocyanato-1-methylethyl)benzene", "1, 3-bis(1-isocyanato-1-methylethyl)benzene", "alpha, alpha, alpha', alpha'-tetramethyl-1, 3-xylylene diisocyanate", "alpha, alpha, alpha', alpha'-tetramethyl-1, 3-xylylene diisocyanate", m-TMXDI, m-TMXDI

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

Very toxic by inhalation.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Although ingestion is not thought to produce harmful effects, the material may still be damaging to the health of the individual following ingestion, especially where pre-existing organ (e.g. liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality (death) rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern. 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 material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

SKIN

Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. The material is not thought to be a skin irritant (as classified using animal models). Temporary discomfort, however, may result from prolonged dermal exposures. Good hygiene practice requires that exposure be kept to a minimum and that suitable gloves

be used in an occupational setting. Sensitization may result in allergic dermatitis responses including rash, itching, hives or swelling of extremities. Sensitization reactions may appear suddenly after repeated symptom free exposures. The material may accentuate any pre-existing skin condition. Bare unprotected skin should not be exposed to this material. Toxic effects may result from skin absorption. 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

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. The vapor/mist may be highly irritating to the upper respiratory tract and lungs; the response may be severe enough to produce bronchitis and pulmonary edema. Possible neurological symptoms arising from isocyanate exposure include headache, insomnia, euphoria, ataxia, anxiety neurosis, depression and paranoia. Gastrointestinal disturbances are characterized by nausea and vomiting. Pulmonary sensitization may produce asthmatic reactions ranging from minor breathing difficulties to severe allergic attacks; this may occur following a single acute exposure or may develop without warning for several hours after exposure. Sensitized people can react to very low doses, and should not be allowed to work in situations allowing exposure to this material. Continued exposure of sensitized persons may lead to possible long term respiratory impairment. Inhalation hazard is increased at higher temperatures. Respiratory sensitization may result in allergic/asthma like responses; from coughing and minor breathing difficulties to bronchitis with wheezing, gasping. Inhalation of vapor may aggravate a pre-existing respiratory condition.

CHRONIC HEALTH EFFECTS

There is some evidence that inhaling this product is more likely to cause a sensitization reaction in some persons compared to the general population.

Principal routes of exposure are usually by inhalation of vapor and skin contact/absorption. Isocyanate vapors are irritating to the airways and can cause their inflammation, with wheezing, gasping, severe distress, even loss of consciousness and fluid in the lungs. Nervous system symptoms that may occur include headache, sleep disturbance, euphoria, inco-ordination, anxiety, depression and paranoia. Digestive effects include nausea and vomiting. Breathing difficulties may occur unpredictably after a period of tolerance and after skin contact. Allergic inflammation of the skin can occur, with rash, itching, blistering, and swelling of the hands and feet. Sensitive people can react to very low levels and should not be exposed to this material. Sensitization may give severe responses to very low levels of exposure, i.e. hypersensitivity. Sensitized persons should not be allowed to work in situations where exposure may occur.