

化 学 品 安 全 技 术 说 明 书

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MSDS标题

HEXAMETHYLDISILAZANE MSDS报告

产品标题

六甲基二硅胺烷;1, 1, 1-三甲基-N-(三甲基甲硅烷基)硅烷胺;六甲基二硅氮烷

CAS号

999-97-3

化学品及企业标识

PRODUCT NAME

HEXAMETHYLDISILAZANE

NFPA

Flammability	4
Toxicity	4
Body Contact	4
Reactivity	1
Chronic	2

SCALE: Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4

PRODUCT USE

Silylating agent. Chemical intermediate; chromatographic packings. Reagent for the preparation of trimethylsilyl derivatives.

SYNONYMS

C6-H19-N-Si2, C6-H19-N-Si2, (CH3)3SiNHSi(CH3)3, bis(trimethylsilyl)amine, HMDS, OAP, hexamethylsilazane, "disilazane, 1, 1, 1, 3, 3, 3-hexamethyl-", "disilazane, 1, 1, 1, 3, 3, 3-hexamethyl-", "1, 1, 1, 3, 3, 3-hexamethyldisilazane", "1, 1, 1, 3, 3, 3-hexamethyldisilazane", "1, 1, 1, 3, 3, 3-hexamethyl-disilazane", "1, 1, 1, 3, 3, 3-hexamethyl-disilazane", "silanamine, 1, 1, 1-trimethyl-N-(trimethylsilyl)-", "silanamine, 1, 1, 1-trimethyl-N-(trimethylsilyl)-", "silylating agent"

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

Irritating to eyes and skin.

Extremely flammable.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Accidental ingestion of the material may be severely damaging to the health of the individual; animal experiments indicate that ingestion of less than 5 gram may be fatal. The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion. Ingestion of alkaline corrosives may produce burns around the mouth, ulcerations and swellings of the mucous membranes, profuse saliva production, with an inability to speak or swallow. Both the esophagus and stomach may experience burning pain; vomiting and diarrhea may follow. Epiglottal swelling may result in respiratory distress and asphyxia; shock can occur. Narrowing of the esophagus, stomach or stomach valve may occur immediately or after a long delay (weeks to years). Severe exposure can perforate the esophagus or stomach leading to infections of the chest or abdominal cavity, with low chest pain, abdominal stiffness and fever. All of the above can cause death.

EYE

This material can cause eye irritation and damage in some persons. The material can produce chemical burns to the eye following direct contact. Vapors or mists may be extremely irritating. If applied to the eyes, this material causes severe eye damage. Direct eye contact with corrosive bases can cause pain and burns. There may be swelling, epithelium destruction, clouding of the cornea and inflammation of the iris. Mild cases often resolve; severe cases can be prolonged with complications such as persistent swelling, scarring, permanent cloudiness, bulging of the eye, cataracts, eyelids glued to the eyeball and blindness.

SKIN

Skin contact with the material may produce severe damage to the health of the individual; systemic effects may result following absorption and these may be fatal. The material can produce chemical burns following direct contact with the skin. The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterized by redness, swelling and blistering. Skin contact is not thought to have harmful health effects, however the material may still produce health damage following entry through wounds, lesions or abrasions. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. Skin contact with alkaline corrosives may produce severe pain and burns; brownish stains may develop. The corroded area may be soft, gelatinous and necrotic; tissue destruction may be deep.

INHALED

Inhalation may produce severe health damage*. Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may produce severely damaging effects to the health of the individual. Relatively small amounts absorbed from the lungs may prove fatal. Inhalation of quantities of liquid mist may be extremely hazardous, even lethal due to spasm, extreme irritation of larynx and bronchi, chemical pneumonitis and pulmonary edema. Inhaling corrosive bases may irritate the respiratory tract. Symptoms include cough, choking, pain and damage to the mucous membrane. In severe cases, lung swelling may develop, sometimes after a delay of hours to days. There may be low blood pressure, a weak and rapid pulse, and crackling sounds.

CHRONIC HEALTH EFFECTS

Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Gastrointestinal disturbances may also occur. Chronic exposures may result in dermatitis and/or conjunctivitis.