西亚试剂® Xiya Reagent 说明书

www.xiyashiji.com

化 学 品 安 全 技 术 说 明 书

填表时间 2020-01-06

打印时间 2026-02-11

MSDS标题

M-NITROTOLUENE MSDS报告

产品标题

1-甲基-3-硝基苯;间甲基硝基苯;3-硝基甲苯

CAS号

99-08-1

化学品及企业标识

PRODUCT NAME

M-NITROTOLUENE

NFPA

Flammability	1
Toxicity	3
Body Contact	3
Reactivity	2
Chronic	2

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

PRODUCT USE

Organic syntheses. Intermediate

xiya

SYNONYMS

C7-H7-N-O2, C7-H7-N-O2, O2NC6H4CH3, "toluene, m-nitro-", "toluene, m-nitro-", 3-methylnitrobenzene, 3-methylnitrobenzene, m-methylnitrotoluene, m-methylnitrotoluene, MNT, 3-nitrotoluol, 3-nitrotoluol

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

Heating may cause an explosion.
Toxic by inhalation, in contact with skin and if swallowed.
Toxic to aquatic organisms, may cause long- term adverse effects in the aquatic environment.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Toxic effects may result from the accidental ingestion of the material; animal experiments indicate that ingestion of less than 40 gram may be fatal or may produce serious damage to the health of the individual. The substance and/or its metabolites may bind to hemoglobin inhibiting normal uptake of oxygen. This condition, known as "methemoglobinemia", is a form of oxygen starvation (anoxia). Symptoms include cyanosis (a bluish discoloration skin and mucous membranes) and breathing difficulties. Symptoms may not be evident until several hours after exposure. At about 15% concentration of blood methemoglobin there is observable cyanosis of the lips, nose and earlobes. Symptoms may be absent although euphoria, flushed face and headache are commonly experienced. At 25-40%, cyanosis is marked but little disability occurs other than that produced on physical exertion. At 40-60%, symptoms include weakness, dizziness, lightheadedness, increasingly severe headache, ataxia, rapid shallow respiration, drowsiness, nausea, vomiting, confusion, lethargy and stupor. Above 60% symptoms include dyspnea, respiratory depression, tachycardia or bradycardia, and convulsions. Levels exceeding 70% may be fatal. Case of nitrotoluene poisoning are rare especially in comparison with nitrobenzene which is thought to considerably more toxic. There is evidence that the isomers of nitrotoluene vary in toxicity. The three isomers were fed to mice and rats for 13 weeks. o-Nitrotoluene produced the greatest effect. At 2500 ppm o-nitrotoluene and above all animals showed depressed body weight gain. At concentrations equal to 1200 ppm o-nitrotoluene, liver, spleen and kidney toxicity was evident. In female rats, o-nitrotoluene ingestion produced kidney and spleen lesions at 2500 ppm. Ingestion of m-toluene was associated with reduced body weights in rats and mice at 10, 000 ppm; renal damage was see in male rats given 625 ppm m-

xiya

nitrotoluene. At 2500 ppm m- nitrotoluene, histopathologic damage was seen in the spleens of male and female rats. At 10,000 ppm p-nitrotoluene weight depression was seen in both mice and rats. All dose levels of p-nitrotoluene caused significant lesions in rat kidney and spleen (but not in mice). Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce gastrointestinal discomfort and may be harmful if swallowed. Ingestion may result in nausea, pain and vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

EYE

Although the liquid 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).

SKIN

Skin contact with the material may produce toxic effects; systemic effectsmay result following absorption. The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives . 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.

INHALED

Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may produce toxic effects; these may be fatal. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of high concentrations of gas/vapor causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.

CHRONIC HEALTH EFFECTS

Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified using animal models); nevertheless exposure by all routes should be minimized as a matter of course. Suspected of causing anaemia in chronic exposures.

Xiya