西亚试剂® Xiya Reagent 说明书

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化 学 品 安 全 技 术 说 明 书

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MSDS标题

O-TOLIDINE MSDS报告

产品标题

邻联甲苯胺, 托力丁倍司, 联邻甲苯胺

CAS号

119-93-7

化学品及企业标识

PRODUCT NAME

O-TOLIDINE

NFPA

Flammability	1
Toxicity	2
Body Contact	0
Reactivity	1
Chronic	3

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

PRODUCT USE

Dangerous POISON. Available ONLY for industrial and manufacturing purposes. To be used by or in accordance with directions of accredited pest control officers. Operators to be trained in procedures for safe use of material. Used in the manufacture of dyes. Used as stain developer in microscopy. Intermediate

SYNONYMS

C14-H16-N2, bianisidine, "(1, 1'-biphenyl)-4, 4'-diamine-3, 3'-dimethyl-", "(1, 1'-biphenyl)-4, 4'-diamine-3, 3'-dimethyl-", "4, 4'-bi-o-toluidine", "4, 4'-bi-o-toluidine", "C.I. 37230", "C.I. Azoic Diazo Component 113", "4, 4'-diamino-3, 3'-dimethylbiphenyl", "4, 4'-diamino-3, 3'-dimethylbiphenyl", "4, 4'-diamino-3, 3'-dimethyldiphenyl", "4, 4'-diamino-3, 3'-dimethyldiphenyl", diaminoditolyl, "3, 3'-dimethylbenzidin", "3, 3'-dimethylbenzidin", "3, 3'-dimethylbenzidine", "3, 3'-dimethylbenzidine", "3, 3'-dimethyl-4, 4'-biphenyldiamine", "3, 3'-dimethyl-4, 4'-biphenyldiamine", "3, 3'-dimethylbiphenyl-4, 4'-diamine", "3, 3'-dimethylbiphenyl-4, 4'-diamine", "3, 3'-dimethyl-4, 4'-diphenyldiamine", "3, 3'-dimethyl-4, 4'-diphenyldiamine", "3, 3'-dimethyldiphenyl-4, 4'-diamine", "3, 3'-dimethyldiphenyl-4, 4'-diamine", "4, 4'-di-o-toluidine", "4, 4'-di-o-toluidine", "o-tolidine (ACGIH)", "o-tolidine (ACGIH)", "3, 3'-tolidine", "3, 3'-tolidine", o-tolidin, o-tolidin, tolidine, "o, o'-tolidine", "o, o'-tolidine", DMB, 2-tolidin, 2-tolidin, 2-tolidine, 2-tolidine, 2-tolidina, 2-tolidina, "Fast Dark Blue Base R", "RCRA Waste Number UO94"

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

Harmful if swallowed.
May cause CANCER.
Toxic to aquatic organisms, may cause long- term adverse effects in the aquatic environment.

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. 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.

EYE

Although the material is not thought to be an irritant, direct contact with the eye may cause transient discomfort characterized by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result. The material may produce foreign body irritation in certain individuals.

SKIN

Skin contact is not thought to produce harmful health effects (as classified using animal models). Systemic harm, however, has been identified following exposure of animals by at least one other route and the material may still produce health damage following entry through wounds, lesions or abrasions. Good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. 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

The material is not thought to produce respiratory irritation (as classified using animal models). Nevertheless inhalation of dusts, or fume, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress. Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

CHRONIC HEALTH EFFECTS

There is ample evidence that this material can be regarded as being able to cause cancer in humans based on experiments and other information. Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung. Prime symptom is breathlessness; lung shadows show on X-ray. Most arylamines are powerful poisons to the blood-making system. High chronic doses cause congestion of the spleen and tumor formation. o-Tolidine is a urinary metabolite found in workers engaged in the manufacture of 3,3'- dimethylbenzidine dyes. Human intestinal microflora are responsible for the initial biotransformation of these dyes. Elevated risk for cancer of the urinary bladder has been found in workers engaged in dye manufacture and those exposed to a combination of benzidine and o-

tolidine. Administration of o-tolidine has produced cancer in some tissues but not in bladder. When introduced by gastric intubation mammary carcinomas were induced, whilst commercial grade o-tolidine induced Zymbal gland carcinomas and auditory canal carcinomas following subcutaneous injection. When administered in drinking water rats showed benign and malignant neoplasms of the skin, Zymbal's gland, liver, oral cavity, small and large intestine and lung. male rats exhibited an increased incidence of benign and malignant neoplasms of the preputial gland and mesothelium and an increased incidence of brain neoplasms. Female rats showed benign and malignant neoplasms of the clitoral and mammary gland and brain neoplasms.