

化 学 品 安 全 技 术 说 明 书

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MSDS标题

LITHIUM AZIDE MSDS报告

产品标题

叠氮化锂

CAS号

19597-69-4

化学品及企业标识

PRODUCT NAME

LITHIUM AZIDE

NFPA

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

PRODUCT USE

Reagent.

SYNONYMS

LiN3

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

Heating may cause an explosion.
Flammable.

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. Azides, if swallowed, can cause breathlessness and rapid heart beat within 5 minutes. Nausea, vomiting, headache, restlessness and diarrhea can occur within 15 minutes. Other symptoms include low blood pressure which cannot be corrected, abnormal breathing, reduced body temperature, reduced blood pH, convulsions, collapse and death. Continued administration can cause increased sensitivity. Poisoning can cause headaches and acidosis. Several grams of sodium azide can cause liver, pulmonary and brain swelling with death occurring in less than an hour. Large doses of azide increases the blood pressure and causes generalized convulsions, followed by depression and collapse. Lithium, in large doses, can cause dizziness and weakness. If a low salt diet is in place, kidney damage can result. There may be dehydration, weight loss, skin effects and thyroid disturbances. Central nervous system effects include slurred speech, blurred vision, numbness, inco-ordination and convulsions. Repeated exposure can cause diarrhea, vomiting, tremor, muscle jerks and very brisk reflexes.

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).

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.

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. 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. Azide vapors are irritating and cause bronchitis and lung edema. If inhaled, sore throat, cough, dizziness, shortness of breath and fainting can result. Inhalation can result in similar symptoms as ingesting the substance. Other effects include eye irritation, headache, low blood pressure and collapse. Blindness, rigidity, liver and brain damage is possible.

CHRONIC HEALTH EFFECTS

Principal routes of exposure are by accidental skin and eye contact and inhalation of generated dusts. Workers exposed chronically to hydrazoic acid (produced in aqueous solutions of sodium azide) frequently complain about headache. Rapid falls in blood pressure can also result. Lithium compounds can affect the nervous system and muscle. This can cause tremor, inco- ordination, spastic jerks and very brisk reflexes. They may cause birth defects and should not be used when pregnancy is suspected. They are effective in treating manic episodes of bipolar disorder. Restricting sodium in the diet increases the risks of taking lithium.