

化 学 品 安 全 技 术 说 明 书

填表时间 2019-12-28

打印时间 2026-03-25

MSDS标题

LITHIUM LAURYL SULFATE MSDS报告

产品标题

月桂烷基磺酸锂

CAS号

2044-56-6

化学品及企业标识

PRODUCT NAME

LITHIUM LAURYL SULFATE

NFPA

Flammability	1
Toxicity	2
Body Contact	2
Reactivity	1
Chronic	2

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

PRODUCT USE

Wetting agent, detergent. Useful in polyacrylamide gel electrophoresis.

SYNONYMS

C12-25-Li-O4-S, C12-25-Li-O4-S, CH₃(CH₂)₁₀CH₂OSO₃Li, "lithium n-dodecyl sulfate", "lithium n-dodecyl sulfate", "dodecyl alcohol, hydrogen sulfate, lithium salt", "lithium monododecyl sulfate", "dodecyl sulphate, lithium salt", "Empicol XM17"

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

Irritating to eyes and skin.

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 of anionic surfactants may produce diarrhea, bloated stomach, and occasional vomiting. 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

This material can cause eye irritation and damage in some persons. Direct eye contact with some anionic surfactants in high concentration can cause severe damage to the cornea. Low concentrations can cause discomfort, excess blood flow, and corneal clouding and swelling. Recovery may take several days. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

SKIN

This material can cause inflammation of the skin on contact in some persons. 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. Excessive use or prolonged contact may lead to defatting, drying and irritation of sensitive skin. Solution of material in moisture on the skin, or perspiration, may markedly increase skin corrosion and accelerate tissue destruction. Anionic surfactants can cause skin redness and pain, as well as a rash. Cracking, scaling and blistering can occur. Repeated skin contact with some sulfonated surfactants has produced sensitization dermatitis in predisposed individuals. The material may cause severe 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. Repeated exposures may produce severe ulceration.

INHALED

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Respiratory sensitization may result in allergic/asthma like responses; from coughing and minor breathing difficulties to bronchitis with wheezing, gasping. 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. Exposure to Sulfonates can cause an imbalance in cellular salts and therefore cellular function. Airborne sulfonates may be responsible for respiratory allergies and, in some instances, minor dermal allergies.

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 by accidental skin and eye contact and inhalation of generated dusts. The sodium salt of the substance has been reported to cause pulmonary sensitisation resulting in hyperactive airway dysfunction and pulmonary allergy accompanied by fatigue, malaise and aching. Significant symptoms of exposure can persist for more than two years and can be activated by a variety of non-specific environmental stimuli such as an exhaust, perfumes and passive smoking. Lithium compounds can affect the nervous system and muscle. This can cause tremor, incoordination, 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.