

## 化 学 品 安 全 技 术 说 明 书

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### MSDS标题

X-RAY FLUX TYPE 12:22 MSDS报告

### 产品标题

焦硼酸锂;四硼酸二锂

### CAS号

12007-60-2

### 化学品及企业标识

## PRODUCT NAME

X-RAY FLUX TYPE 12:22

## NFPA

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

## PRODUCT USE

Laboratory reagent; fusing agent for x- ray fluorescence analysis.

## **SYNONYMS**

"fusion agent for X-ray fluorescence analysis", "XRF melt", "laboratory reagent", "fusion mixture", "Li/La fusion mix"

## **CANADIAN WHMIS SYMBOLS**

## **EMERGENCY OVERVIEW**

## **RISK**

## **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. 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. Considered an unlikely route of entry in commercial/industrial environments.

## **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. Open cuts, abraded or irritated skin should not be exposed to this material.

## **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. 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**

Principal routes of exposure are by accidental skin and eye contact and inhalation of generated dusts. 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. Borate can accumulate in the testes and deplete germ cells and cause withering of the testicles, according to animal testing. Hair loss, skin inflammation, stomach ulcer and anemia can all occur. Repeated swallowing or inhalation irritates the stomach, causes a loss of appetite, disturbed digestion, nausea and vomiting, red rash, dry skin and mucous membranes, reddening of the tongue, cracking of the lips, inflamed conjunctiva, swelling of the eyelids and kidney injury. Prolonged ingestion causes effects to the reproductive system in both males and females. As with any chemical product, contact with unprotected bare skin; inhalation of vapor, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.