

Material Safety Data Sheet

SECTION I – PRODUCT IDENTIFICATION AND USES

Product name	SODIUM ETHYL XANTHATE
Applications	Gold processing agent, used in flotation of sulfide ores as a collector
Sales representative	LMS Canada

SECTION II – CHEMICAL INGREDIENTS

Main ingredient	C ₂ H ₅ OC(S)SNa: 83 – 83.5%; 90 – 93% when it's dry free alkali: ≤0.5%
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SECTION III – PHYSICAL & CHEMICAL DATA

Physical state	Solid
Appearance	Light orange powder
Odour	Unpleasant odor
Vapor pressure	N/A
Vapor density	N/A
Melting point	Approx 182 °C
Evaporation rate	N/A
pH value	Solution presents weak base, pH value not available
Special gravity	1.26

SECTION IV – FIRE AND EXPLOSION

Flammability	Spontaneously combustible. May be flammable where presence of moisture in the air.
Flashpoint	N/A
Auto-ignition temperature	Approx 250 °C
Fire / explosion data	May ignite then produce flammable, poisonous and/or corrosive gases when contacting with air, moist air or water, especially with water – may react vigorously or explosively and release highly toxic carbon disulfide vapors. Container may explode when heated.
Means of extinction	Use dry chemical, soda ash or lime for small fire. Do not use water, CO ₂ , or foam on material itself. For large fire, use dry chemical, soda or lime. Flooding amount of water may be needed in order to eliminate hazardous reaction since material generates its own oxygen. Suffocating with dry sand may be ineffective. If safe to do so, move intact containers from the fire area, cool containers with flooding quantities of water until well after fire is out. Avoid getting water inside containers and in contact with the material. Avoid getting runoff into drains and waterways. Runoff may create multiple fire or explosion hazards, keep in a protective medium. Full protective equipment and self contained breathing apparatus

must be worn when combating fire.

SECTION V – STABILITY AND REACTIVITY

Chemical stability	Relatively stable when dry. Hygroscopic and easily reacts with moisture.
Solubility	Soluble in water 450 g/L at 25 °C; also soluble in alcohol
Incompatibility with other substances	Water, acids
Reactivity, and under what conditions	Absorbs moisture and reacts to form carbon disulfide, ethyl alcohol, sodium carbonate and trithiocarbonate. Generate heat at the same time and the heat accelerates decomposition. Decomposition also occurs under condition of acid.

SECTION VI – TOXICOLOGICAL PROPERTIES

Skin contact	May lead to drying and defecting of skin, rash, dermatitis and burns. Toxic effects may result form skin absorption.
Eye contact	May result in irritation, pain, redness and conjunctivitis. Prolonged contact may cause corneal burns and possible permanent damages.
Inhalation	Inhalation may cause tremors, loss of consciousness, difficulty in breathing, vascular collapse and death due to relief of carbon disulfide.
Ingestion	If swallowed, may cause burns, gastrointestinal tract irritation, nausea, abdominal pain, and other toxic reacts. May damage liver and kidneys.

SECTION VII – PREVENTIVE MEASURES

Personal protective gear	Where creation of dust is unavoidable, use conventional approved or equivalent respiratory protection equipment based on consideration of airborne and duration of exposure.
Hand	Gloves impervious to chemicals.
Eye	Use eye protection equipment such as safety glasses, goggles or face shields as appropriate to minimize contact with dust or vapor from product.
Other	Wear suitable protective clothing, footwear, to eliminate direct skin contact, especially in applications of prolonged exposure and / or high concentrations. Clean clothing that has become dusty before reusing. Use material with adequate ventilation or local exhaust system.

SECTION VIII – FIRST AID MEASURES

Skin	Remove contaminated clothing and flush affected area with large quantities of water. If irritation occurs, obtain medical assistance immediately. Laundry clothing before reusing.
Eye	Hold eyelids apart and flush continuously with running water or sterile saline solution for at least 15 minutes. Obtain medical attention.
Inhalation	Leave area of exposure. Allow victim to assume most comfortable position and keep warm. Seek urgent medical attention if symptoms of poisoning are noticed.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water immediately. Give water to drink. Seek immediate medical attention.

Other Eyewash and drench facilities should be available at workplace.
In case of accident or feeling unwell, contact a doctor or a poisons information center immediately for help, show label where possible.

SECTION IX – STORAGE, SHIPPING & DISPOSAL

Spillage and waste disposal

Clean up personnel should wear appropriate protective clothing and footwear to avoid direct skin contact. Eliminate all potential ignition sources. Stop leaking if safe to do so. Prevent entry into waterways, drains and sewages. Cover spills with dry earth, sand or other non-combustible materials, followed by plastic sheets to minimize spreading or contacting with rain. Use clean and non-sparking tools to collect absorbed material and place it in covered water-resistant containers for later disposal. Apply proper methods that meet local applicable regulations for disposal.

Contaminated area may be sprayed with water to knock down or divert vapor clouds.

Handling procedures and equipment

Take precautions against static discharges. Use safe work practices to avoid eye and skin contacts and inhalation. Observe good personal hygiene. Prohibit eating, drinking and smoking in work area. Wash hands before eating. Remove contaminated clothing and protective equipment before entering eating areas.

Packing and shipping information

Treat as dangerous goods of spontaneous combustible, pack and ship accordingly.

Storage requirement

Store in dry, cool, and ventilated areas. Keep away from sources of heat and ignitions. Remove from direct sunlight. Isolate from acid. Ensure containers are properly closed and protected against physical damage. Containers should be properly labeled. Keep locked up and out of reach of children..

SECTION X – PREPARATION OF MSDS

Prepared and translated by LMS Canada

Last update June, 2006

Note: The information in this Material Safety Data Sheet associates only to the specific material designated herein and does not apply to uses in combination with any other materials or for any other processes. The information given is based on technical data provided by the manufacturer and those publications available when compiling/updating document and we believed to be reliable. It is subject to change or update without notice. Because conditions of applications vary and are beyond our control, it is users' responsibility to obtain safety data for combinations with other materials, or for applications in other processes. Always follow local safety regulations applicable on erection sites.