



## SECTION 6 - TOXICOLOGICAL PROPERTIES

Route of Entry: Inhalation or skin contact

Effects of Acute Exposure to Material: INHALATION OF FRESHLY FORMED FUME MAY CAUSE METAL FUME FEVER. INITIAL SYMPTOMS INCLUDE DRYNESS AND IRRITATION OF THE THROAT. SEVERAL HOURS AFTER EXPOSURE, SIGNS INCLUDE A METALLIC TASTE IN THE MOUTH, HEADACHE, FEVER, CHILLS, EXCESSIVE SWEATING, MUSCLE PAINS, NAUSEA, VOMITING AND WEAKNESS. RECOVERY FROM SYMPTOMS OCCURS WITHIN 48 HOURS. METAL FUME FEVER IS NOT USUALLY FATAL

Effects of Chronic Exposure: There are no known chronic effects relating to repeated incidences of metal fume fever.

Carcinogenicity: NONE Teratogenicity: NONE  
Synergistic Materials: NONE LD50: N. AV

Mutagenicity: NONE  
LC50: N. AV

---

## SECTION 7 - PREVENTIVE MEASURES

Engineering Controls: For low level fume generation use general dilution ventilation For higher levels of fume generation, local exhaust is required. A health and safety consultant can assess your individual ventilation needs see; Industrial Ventilation: A manual recommended practice; by the Acgih

Personal Protective Equipment:

Gloves: Required only if dermatitis results from handling

Respirator: Low fume concentrations in vicinity of TLV, use portable fume respirator or high efficiency particulate filter (NIOSH APPROVED)

Consult: CSA STD. Z94. 4-M1982 "Selection, Care and Use of Respirator"

Eye Protection: Tinted shielded safety glasses should be worn to provide protection against molten metal splashes and strong ultra-violet or infrared energy emitted form the molten metal.

Consult: CSA STD. Z94.3-M1982 "Industrial Eye and Face Protectors"

Leak and Spill Procedures: Spill of molten metal should be smothered with sand or other suitable class D extinguishing media

Waste Disposal: Return to manufacturer for refining

Storage Requirements: Store in dry container away from incompatibles

---

## SECTION 8 - FIRST AID MEASURES

If a person breathes large amounts of metal fume, move them to fresh air. If breathing has stopped, perform artificial respiration. Keep the person warm and at rest. If breathing is difficult, provide oxygen. Take the person to medical attention if they exhibit symptoms of metal fume fever noted in Section 6. Administer normal first aid to burns caused by molten metal. If dermal irritation initiates from handling material, wash affected area thoroughly with soap and water.

---

## SECTION 9 - PREPARATION DATE OF MSDS

Prepared by: Greg Normandeau CET, Technical Services Manager  
Phone Number: (905) 475-9566 Date: August 23, 2004