

GC Electronics
1801 Morgan Street
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Product Name: Soldering Flux
MSDS Number: 142
Revision Date: 9/16/09
Supersedes Date: 7/11/06

MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Type: Mild Chloride
Product Name: **Solder Flux**
Part Number(s): **10-200**

Emergency Contact: Chemtrec
Phone (24 hours): (800) 424-9300

Section 1 - Identification of Product

HMIS RATINGS	NFPA CLASSIFICATION	Least	0
Health	2	Health	2
Flammability	0	Flammability	0
Reactivity	0	Reactivity	0
		Slight	1
		Moderate	2
		High	3
		Extreme	4
		Gloves, Safety Glasses B	

Section 2 - Hazardous Ingredients

Hazardous Component	CAS #	Wght	OSHA TWA	ACGIH TWA	Other limits
+ Zinc Chloride	7646-85-7	10%	1mg/M3	1mgM3	NE
Ammonium Chloride (as Zinc Ammonium Chloride)	12125-02-9		10mg/M3	10 mg/M3	NE

Only those ingredients listed in this section have been determined to be hazardous as defined in 29CFR 1910.1200.

+ denotes a chemical regulated as toxic by the Environmental Protection Agency (EPA) as outlined in 40 CFR Part 372 (section 313)

Section 3 - Physical Data

Boiling Point:	230°F
Evaporation Rate (butyl acetate=1):	<1
Vapor Density:	NE
Vapor Pressure (mm Hg):	NE
Solubility in water:	100
Specific Gravity:	1.10
Melting Point:	NE
Appearance and odor:	Clear to slight yellow liquid, odorless

Section 4 - Fire & Explosion Hazard Data

Flammable limits	LEL N/A UEL N/A
Flash Point:	Nonflammable
Extinguishing media:	Any media that will extinguish a fire may be used.
Unusual Fire and Explosion Hazards:	May release hydrochloric acid, zinc chloride, zinc oxide.
Special fire fighting Procedures:	Use self contained breathing apparatus

Section 5 - Health Hazard Data

Routes of entry:	Inhalation Yes Skin No Ingestion Yes
Health Hazards (acute and chronic)	Contact with material or fumes may cause skin, eye and respiratory tract irritation or burns.
Severe inhalation:	Can cause pulmonary edema, which may not manifest for several hours after exposure.
Ingestion:	May result in irritation or burning of the digestive tract.
Gross Inhalation or Ingestion:	Can result in death. LD50 (ZnCl ₂) (rat) = 350 mg / kg. May be mutagenic in lab animals. May cause sensitization.
Chronic exposures:	Can result in permanent liver, kidney and respiratory system effects. Studies show that health risks vary by individual. Minimize exposure as a precaution.
Carcinogenicity:	Not determined NPT No IARC Monographs No
Signs and symptoms of exposure:	
Inhalation:	Nose & throat irritation, headache, dizziness, difficulty breathing, coughing.
Ingestion:	Nausea, vomiting, cramps.
Eye:	Redness, burning, tearing, blurred vision.
Skin:	Redness, burning, rash, dryness.
Medical Conditions Aggravated by Exposure:	Skin, kidney and respiratory conditions.
Emergency First Aid Procedures Skin:	Flush with water immediately – Seek medical attention if necessary

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Eyes: Flush with water for 15 minutes- Seek medical attention.
Ingestion: DO NOT induce vomiting, drink large amounts of water – Seek medical attention. Never give anything by mouth to an unconscious person
Inhalation: Remove to fresh air. Support respiration if required- Seek medical attention.

Section 6 - Reactivity Data

Conditions to avoid: None
Stability: Stable
Incompatibility (Materials to avoid): Oxidizers, strong acids & bases, sulfides.
Hazardous Decomposition or Byproducts (incomplete Combustion): Hydrochloric acid, zinc oxide, ammonia, zinc chloride
Hazardous Polymerization: Will not occur
Conditions to avoid: None

Section 7 - Spill or Leak Procedures

Steps to be taken if material is released or spilled: Flush into a chemical sewer or soak up with a suitable absorbent.
Waste Disposal Method: Dispose of in accordance with all local state and federal regulations

Section 8 - Special Protection Information

Respiratory Protection (type): Acid type respirator for fumes and mist.
Ventilation: Local Exhaust preferred Special NE
Mechanical Ok Other NE
Protective Gloves: Plastic or rubber
Eye Protection: Goggles or face shield
Other Protective Clothing or Equipment: As required to avoid contact.
Work /Hygenic Practices: Wash after use: Follow good industrial hygenic practices.

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Section 9 – Special Precautions

Other Precautions: Avoid skin & eye contact, inhalation & ingestion of fumes and material.
Wash contaminated clothing before reuse. Keep away from children.
Do not reuse container.

Section 10 - Regulatory Information

DOT Classification: Non-Hazardous
Hazard Class: Not regulated
UN or NA ID#: None
Labeling: None
NFPA Classification: (NFPA 325M, 8th edition)
NE not established NA = not applicable

Zinc Chloride is a chemical regulated as toxic by the Environmental Protection Agency (EPA) as outlined in 40 CFR Part 372 (section 313).

Disclaimer

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