

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Code 47180262
Trade Name SOLDERON TIN CONCENTRATE
Manufacturer/Supplier Shipley Company
Address 455 Forest St.
Marlborough, Massachusetts 01752
Phone Number (508) 481-7950
Emergency Phone Number (508) 481-7950
Chemtec # (800) 424-9300
MSDS first issued 1 October 1999
MSDS data revised
Prepared By: Environmental, Health & Safety Department
Local Sales Company Shipley Company, 455 Forest Street, Marlboro, MA 01752
(508-481-7950)

2. COMPOSITION/INFORMATION ON THE INGREDIENTS

Components without CAS numbers are Trade Secret

Table with 3 columns: Component Name, CAS# / Codes, Concentration. Rows include water, Sulfonic Acid, and Tin Compound.

3. HAZARD IDENTIFICATION

Main Hazards - Corrosive - Skin - Eye - Respiratory System
Routes of Entry Inhalation, ingestion, eye and skin contact.
Carcinogenic Status Not considered carcinogenic by NTP, IARC and OSHA
Target Organs - Eye - Skin - Respiratory System
Health Effects - Eyes Liquid will cause severe conjunctival irritation, corneal damage, and may result in loss of vision.
Health Effects - Skin Material will cause chemical burns.
Health Effects - Ingestion Swallowing may have the following effects:
Health Effects - Inhalation Exposure to mist at high concentrations may have the following effects:

4. FIRST AID MEASURES

First Aid - Eyes Immediately flush the eye with plenty of water for at least 20 minutes, holding the eye open.
First Aid - Skin Immediately flush the skin with large quantities of water, preferably under a shower.
First Aid - Ingestion Do not induce vomiting. Wash out mouth with water.
First Aid - Inhalation Remove from exposure. If there is difficulty in breathing, give oxygen.
Advice to Physicians Treat symptomatically. Treat skin burns conventionally.

5. FIRE FIGHTING MEASURES

Extinguishing Media Use water spray, foam, dry chemical or carbon dioxide.
Special Fire-Fighting Procedures This product may give rise to hazardous vapors in a fire.
Unusual Fire & Explosion Hazards CONTACT WITH METALS MAY EVOLVE FLAMMABLE HYDROGEN GAS.
Protective Equipment for Fire-Fighting Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures Spills may be absorbed with appropriate absorbent material for acid solutions.
Personal Precautions Wear appropriate protective clothing.
Environmental Precautions Prevent the material from entering drains or water courses.

7. HANDLING AND STORAGE

Handling Use local exhaust ventilation. Avoid contact with eyes, skin and clothing.
Storage Store in original containers. Storage area should be:
- cool - dry - well ventilated - out of direct sunlight - away from incompatible materials

Other
None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards
Sulfonic Acid None assigned.
Tin Compound (as organic Sn) ACGIH: TLV 0.1mg/m3 8h TWA. ACGIH: STEL 0.2mg/m3 15min TWA. OSHA: PEL 0.1mg/m3 8h TWA.
Engineering Control Measures Engineering methods to prevent or control exposure are preferred.

	<b>Respiratory Protection</b>	Respiratory protection if there is a risk of exposure to high vapor concentrations. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.
	<b>Hand Protection</b>	Neoprene or nitrile gloves. Other chemical resistant gloves may be recommended by your safety professional.
	<b>Eye Protection</b>	Chemical goggles and face shield.
	<b>Body Protection</b>	- rubber or neoprene apron
9.	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>	
	<b>Physical State</b>	Liquid
	<b>Color</b>	Clear Colorless - Pale Yellow
	<b>Odor</b>	Mild
	<b>VOC (g/l)</b>	0.0
	<b>Specific Gravity</b>	1.25-1.29
	<b>pH</b>	<1.0
	<b>Boiling Range/Point (°C/F)</b>	Not determined.
	<b>Flash Point (PMCC) (°C/F)</b>	Not Flammable
	<b>Explosion Limits (%)</b>	Not applicable.
	<b>Solubility in Water</b>	Completely soluble.
	<b>Vapor Density (Air = 1)</b>	Heavier than air.
	<b>Evaporation Rate</b>	Slower than ether
	<b>Vapor Pressure</b>	Equivalent to water.
10.	<b>STABILITY AND REACTIVITY</b>	
	<b>Stability</b>	Stable under normal conditions.
	<b>Conditions to Avoid</b>	- contact with incompatible materials - High temperatures
	<b>Incompatibilities</b>	- Strong oxidizing agents - Alkalis - Cyanides - sulfides - Metals - Carbonates
	<b>Hazardous Polymerization</b>	Will not occur.
	<b>Hazardous Decomposition Products</b>	- carbon monoxide - Carbon Dioxide - oxides of sulfur
		CONTACT WITH METALS MAY EVOLVE FLAMMABLE HYDROGEN GAS.
11.	<b>TOXICOLOGICAL INFORMATION</b>	
	<b>Acute Data</b>	Sulfonic Acid: Oral LD50 (rat) 2000mg/kg. Single application to the rabbit eye produced severe conjunctival irritation and corneal damage. A single 4h semi-occlusive application to intact rabbit skin produced burns (full thickness destruction of skin).
	<b>Chronic/Subchronic Data</b>	No relevant studies identified.
	<b>Genotoxicity</b>	No adverse effects are expected.
	<b>Reproductive/Developmental Toxicity</b>	No relevant studies identified.
	<b>Additional Data</b>	None.
12.	<b>ECOLOGICAL INFORMATION</b>	
	<b>Mobility</b>	The product will dissolve rapidly in water. The product is poorly absorbed onto soils or sediments. The product will leach into soil.
	<b>Persistence/Degradability</b>	This products contains inorganic salts and/or elements which can persist indefinitely. The term "biodegradation" does not apply to inorganics. The organic part of the product is expected to be readily biodegradable
	<b>Bio-accumulation</b>	The inorganic(s) is taken up by plants and animals and used as an essential nutrient. The organic part of this product is not expected to bioaccumulate.
	<b>Ecotoxicity</b>	The product may be harmful to aquatic organisms.
13.	<b>DISPOSAL CONSIDERATIONS</b>	
	<b>Product Disposal</b>	Dispose of in accordance with all applicable local and national regulations. If discarded in its purchased form, this product would be considered a RCRA hazardous waste because it exhibits the corrosivity characteristic (D002).
	<b>Container Disposal</b>	Labels should not be removed from containers until they have been cleaned. Empty containers may contain hazardous residues. Dispose of containers with care.
14.	<b>TRANSPORT INFORMATION</b>	
	<b>DOT Ground:</b>	Corrosive liquid, acidic, organic, n.o.s.
	<b>UN Proper Shipping Name</b>	Corrosive Liquid, acidic, organic, n.o.s.
	<b>UN Class</b>	(8) Corrosive
	<b>UN Number</b>	UN3265
	<b>UN Packaging Group</b>	II
	<b>N.O.S. 1:</b>	Sulfonic Acid
	<b>N.O.S. 2:</b>	Not applicable.
	<b>Subsidiary Risks</b>	None.
	<b>ADR/RID Substance Identification Number</b>	CLASS 8 - 42(b)
	<b>CERCLA RQ</b>	None.
	<b>Marine Pollutant</b>	None.
15.	<b>REGULATORY INFORMATION</b>	
	<b>TSCA Listed</b>	All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50. This product is not subject to a Section 5(e) Consent Order or Significant New Use Rule (SNUR).
	<b>TSCA Exemptions</b>	
	<b>TSCA Sec.12(b) Export Notification</b>	This product does not contain any substances subject to Section 12(b) export notification.
	<b>WHMIS Classification</b>	E
	<b>MA Right To Know Law</b>	All components have been checked for inclusion on the Massachusetts Substance List (MSL). Those components present at the de minimus concentration have been identified in the hazardous ingredients section of the MSDS.
	<b>California Proposition 65</b>	This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.
	<b>SARA TITLE III-Section 311/312 Categorization (40 CFR 370)</b>	Immediate health hazard
	<b>SARA TITLE III-Section 313 (40 CFR 372)</b>	This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

16.

OTHER INFORMATION

NFPA Rating- FIRE	0
NFPA Rating- HEALTH	3
NFPA Rating- REACTIVITY	1
NFPA Rating- SPECIAL	None.
Revisions Highlighted	
Abbreviations	CAS#: Chemical Abstract Services Number ACGIH: American Conference of Governmental Industrial Hygienists OSHA: Occupational Safety and Health Administration TLV: Threshold Limit Value PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit NTP: National Toxicology Program IARC: International Agency for Research on Cancer R: Risk S: Safety LD50: Lethal Dose 50% LC50: Lethal Concentration 50% BOD: Biological Oxygen Demand Koc: Soil Organic Carbon Partition Coefficient. TLm: Median Tolerance Limit

**Disclaimer**

[The data contained herein is based on information that Shipley Company believes to be reliable, but no expressed or implied warranty is made with regard to the accuracy of such data or its suitability for a given situation. Such data relates only to the specific product described and not to such products in combination with any other product and no agent of Shipley Company is authorized to vary any of such data. Shipley Company and its agents disclaim all liability for any action taken or foregone on reliance upon such data.](#)