



MATERIAL SAFETY DATA SHEET

5-01-89

ACID FLUX CORED SOLDER

CHEMICAL NAME AND SYNONYMS: N/A
 CHEMICAL FAMILY: N/A TRADE NAME: ACID FLUX CORED SOLDER
 FORMULA: MIXTURE D.O.T. SHIPPING CLASS: NON-HAZARDOUS

I. PHYSICAL DATA

BOILING POINT (°F)	280	SPECIFIC GRAVITY (WATER = 1)	N/A
VAPOR PRESSURE ()	N/A	PERCENT VOLATILE (BY VOLUME)	N/A
VAPOR DENSITY (AIR = 1)	4.4	EVAPORATION RATE ()	N/A
SOLUBILITY IN WATER (% by wt.)	COMPLETE		
APPEARANCE AND ODOR	GRAY-LIKE FLUX CONTAINED INSIDE CORED WIRE		

II. HAZARDOUS INGREDIENTS

MATERIAL	%	TLV (ppm)	C. A. S. REGISTRY #
ZINC CHLORIDE	48	N/A	7646-85-7

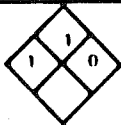
NOTE: SOLDER WIRE CONTAINS ABOUT 68 BY WEIGHT FLUX.
 ZINC CHLORIDE EMITS HYDROCHLORIC ACID DURING THE
 HEAT OF SOLDERING. 35ppm HCL CAUSES IRRITATION TO
 THROAT. CONCENTRATIONS OF 50-100ppm CAN BE TOLERATED
 FOR 1-HOUR.

NONE OF THE INGREDIENTS IS LISTED AS CARCINOGENIC BY IARC, NTP OR OSHA -

III. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (C.O.C.)	380°F	FLAMMABILITY LIMITS IN AIR (% by volume)	LOWER: N/A	UPPER: N/A			
EXTINGUISHING MEDIA:	WATER	CARBON DIOXIDE	X	ALCOHOL FOAM	X	DRY CHEMICAL	X
SPECIAL FIRE FIGHTING PROCEDURES	NONE						
UNUSUAL FIRE AND EXPLOSION HAZARDS	NONE						

NFPA RATING:



The information contained herein is based on data considered accurate and given in good faith but no warranty, expressed or implied, is made.

LITTON/KESTER SOLDER
 515 EAST TOUHY AVENUE
 DES PLAINES, IL 60018
 EMERGENCY PHN (708) 297-1600

IV. HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (OSHA-PEL(CEILING 5ppm) FOR EMITTED HYDROCHLORIC ACID -
 EFFECTS OF OVER-EXPOSURE IRRITATION TO EYES AND THROAT. ZINC CHLORIDE CAN BURN
 OR ULCERATE SKIN. INHALATION-HIGH HAZARD. MILD SENSITIZER MAY CAUSE
 DERMATITIS ON LOCAL CONTACT. CHRONIC HEALTH EFFECTS. FLUX/FUMES MAY CAUSE
 EMERGENCY AND FIRST AID PROCEDURES. PULMONARY IRRITATION OR
 DAMAGE.
 EYE CONTACT FLUSH WITH PLENTY OF WATER, TREAT FOR BURNS.
 SKIN CONTACT WASH WITH SOAP AND PLENTY OF WATER, TREAT FOR BURNS
 INHALATION REMOVE TO FRESH AIR
 INGESTION: N/A

ROUTES OF ENTRY: INHALATION AND INGESTION -

V. REACTIVITY DATA

STABILITY:	UNSTABLE	CONDITIONS TO AVOID: NONE
	STABLE	X
INCOMPATIBILITY (MATERIALS TO AVOID):	STRONG OXIDIZERS	
HAZARDOUS DECOMPOSITION PRODUCTS:	HYDROCHLORIC ACID VAPORS DURING SOLDERING	
HAZARDOUS	MAY OCCUR	CONDITIONS TO AVOID: NONE
POLYMERIZATION:	WILL NOT OCCUR	XX

VI. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: N/A

WASTE DISPOSAL METHOD: ACCORDING TO LOCAL REGULATIONS. MOST FEASIBLE METHOD WOULD BE TO SELL EXCESS METAL WIRE TO METALS RECLAIMER.

VII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE):	USUALLY NOT REQUIRED.	
VENTILATION	LOCAL EXHAUST, REMOVE SMOKE/ VAPORS FROM BREATHING AREA.	SPECIAL: N/A
	MECHANICAL (GENERAL) RECOMMENDED	OTHER: N/A
PROTECTIVE GLOVES:	NONE REQUIRED	EYE PROTECTION SAFETY GOGGLES
OTHER PROTECTIVE EQUIPMENT:	NONE	

VIII. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: FLUX MAY LEAK OUT OF SOLDER WIRE.
 WASH HANDS THOROUGHLY AFTER CONTACTING FLUX. AVOID SKIN OR EYE CONTACT WITH
 FLUX.

OTHER PRECAUTIONS: NONE

JAN 31 1992



NOTICE - TOXIC CHEMICAL(S)

This trade name product/mixture contains a toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40CFR Part 372.

TOXIC CHEMICAL LISTINGS

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Chemical Name</u>	<u>CAS No.</u>
Antimony	7440-36-0	Phosphoric Acid	7664-38-2
Lead	7439-92-1	Xylene(Mixed Isomers)	1330-20-7
Silver	7440-22-4	Thiourea	62-55-6
Sec-Butyl Alcohol	78-92-2	Tetrachloroethylene	127-18-4
Ethylene Glycol	107-21-1	Methyl Chloroform	71-55-6
Methanol	67-56-1	2-Ethoxyethanol	110-80-5
Freon 113	76-13-1	Ammonia	7664-41-7
Hydrochloric Acid	7647-01-0	Methylene Chloride	75-09-2

The percent by weight of each toxic chemical in the trade name product/mixture is located in Section II-Material Safety Data Sheet. This notification must not be detached from the MSDS and that any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.