LEAD FREE MATERIAL SAFETY DATA SHEET

I. MATERIAL IDENTIFICATION

COMPANY: TORREY S. CRANE CO PO BOX 374 492 SUMMER ST PLANTSVILLE, CT. 06479	EMERGENCY PHONE: CALL: CHEM-TEL 1 800-255-3924	INGREDIENTS: SEE LABEL ON CONTAINER OR SPOOL
TRADE NAME: 96.5SN/3AG/.5CU NC 61 NO-CLEAN FLUX	CHEMICAL NAME: TIN/COPPER/SILVER	FORM OF PRODUCTS: BARS, SOLID WIRE, RIBBON

II. CHEMICAL COMPOSITION

ELEMENT	CAS NUMBER	RANGE-%	OSHA PERMISSIBLE EXPOSURE LIMIT - 8 HOUR TWA	ACGIH THRESHOLD LIMIT VALUE - 8 HOUR TWA
Copper	7440.50-8	0 - 5	0.1 mg/m3 Fume	0.2 mg/m3 Fume
Silver	7440-22-4	0 - 5	0.01 mg/m3	0.01 mg/m3
Tin	7440-31-5	0 - 100	2 mg/m3	2 mg/m3
*Alpha methyl styrene	9017-27-0	0-100	5mg/m3	5mg/m3
Monohydric alcohol mixture	9017-27-0	0-100	0.1mg/m3	0.1mg/m3

*ALPHA METHYL STYRENE/VINYL TOLUENE Co POLYMER – "MEETS J STD 004 – RELO"

III. PHYSICAL DATA

Physical State: (normal Conditions) SOLID		Appearance and Odor: METALLIC GRAY - ODORLESS	
Melting Point:	Boiling Point:	Vapor Pressure:	Density:
117 - 1000 F	Flux 385°f	N.A.	0.26 - 0.42lb/in3

IV: FIRE AND REACTIVITY DATA

Flash Point:	Flammable Limits:	Reactivity:
FLUX - 540°F C.O.C.	N.A.	Alloys are stable non-hazardous solids at room temperature

CAUTION:

NEVER USE WATER AS AN EXTINGUISHING MEDIA IN AREAS NEAR MOLTEN METAL. DRY CHEMICAL SHOULD BE USED

V. HEALTH HAZARD DATA

overheating of alloy can produce metal fumes and oxides. Machining operations such as grinding, sawing, buffing can generate airborne particulate in work area. The exposure levels indicated in section II are relevant to these and other operations. Following are symptoms of overexposure to the various ingredients:	
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Copper	Exposure to fume may cause dryness of throat, fatigue, head and body ache, chill and fever.
Silver	Argyria a blue-gray discoloration of the skin, mucous membranes, and eyes may result from inhalation of silver
Tin	Dust of tin oxide may cause pneumoconiosis.

. . NFPA RATINGS (SCALE 0-4): HEALTH=2 FIRE=0 REACTIVITY=0

FIRST AID: Burns from molten metal should be treated as you would a burn from hot grease, cool exposed area with water and seek medical attention. Overheating of metal may generate fumes and/or particulate. If overexposure is suspected employee should be removed from area and a physician consulted. Ingestion of appreciable quantities of alloy is unlikely to occur.

VI. SPILL PROCEDURES

No special precautions are required for spills of bulk material. Scrap alloy can be reclaimed for reuse. Follow Federal, State and local regulations for disposal.

VII. SPECIAL PROTECTION INFORMATION

Where dust or fume levels are in excess of levels in Section II NIOSH approved respiratory protection should be used. Heat resistant gloves should be worn when working with molten alloy. Eye protection should be worn during soldering operation.

VIII. SPECIAL PRECAUTIONS

Practice good personal hygiene. Wash hands thoroughly before eating, smoking or applying cosmetics.

Adequate ventilation should be used when material is in molten or dusty state.

SARA TITLE III SECTION 313 SUPPLIER NOTIFICATION

Solder alloys contain chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1985 and 40 CFR Part 372.

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