

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

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IDENTITY: Lead Free Solder
Included in EI-20K, MT-76K & 35232

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

SECTION I.

MANUFACTURER'S NAME	Master Appliance Corp.	EMERGENCY TELEPHONE NO.	1-800-535-5053 (Infotrac)
ADDRESS	2420 18 TH Street Racine WI 53403	TELEPHONE NO. FOR INFORMATION	1-262-633-7791
		DATE PREPARED	January 17, 2014
		SIGNATURE OF PREPARER	(optional)

SECTION II. HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS

(Chemical Identity: Common Name(s))	US-NIOSH RTECS #	OSHA AL	OSHA PEL	ACGIH TLV	WT. %
Tin (CAS 7440-31-5)	XP7320000	NE	2.0mg/m3	2.0mg/m3	Balance
Copper (CAS 7440-50-8)	GL5325000	NE	1.0mg/m3	1.0mg/mg3	4.95
(dust)					
(fume)			0.1mg/m3	0.2 mg/m3	
Selenium (CAS 7782-49-2)	VS7700000	NE	0.2 mg/m3	0.2 mg/m3	0.05

NE=None Established AL=Action Level PEL=Permissible Exposure Limit TLV=Threshold Limit Value

SECTION III. SHIPPING INFORMATION

PROPER SHIPPING NAME	This product is not regulated by the USDOT as shipped
CLASS AND DIVISION NUMBER	Not Applicable
UN NUMBER	Not Applicable
REQUIRED LABELS	Not Applicable
PACKING GROUP	Not Applicable

SECTION IV. PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT	<4000°F	SPECIFIC GRAVITY (H₂O = 1)	7.39
VAPOR PRESSURE	Not Applicable	MELTING POINT	410°F - 430°F
VAPOR DENSITY	Not Applicable	EVAPORATION RATE (Butyl Acetate = 1)	Not Applicable
SOLUBILITY IN WATER	Insoluble	PH	Not Applicable
APPEARANCE AND ODOR	Solid – silver to silver gray metallic metal, Odorless		

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SECTION V. FIRE AND EXPLOSION HAZARD DATA

FLAMMABLE LIMITS	LEL: Not Applicable	UEL: Not Applicable
FLASH POINT (METHOD USED)	Non-Flammable	
EXTINGUISHING MEDIA	Use media appropriate for surrounding fire. Do not use water on fire where molten metal is present.	
SPECIAL FIRE FIGHTING PROCEDURES	Firefighters should wear a NIOSH/MSHA-approved self-contained breathing apparatus (SCBA) operated in positive pressure mode and full turnout gear or bunker gear.	
UNUSUAL FIRE AND EXPLOSION HAZARDS	The solid metal form is not a fire hazard. However, dust generated from processing operations may present a moderate fire or explosion hazard.	

SECTION VI. REACTIVITY DATA

STABILITY	Stable: Yes
CONDITIONS TO AVOID	Not Applicable
INCOMPATIBILITY (Materials to Avoid)	Chlorine, Turpentine, Magnesium, Acetylene Gas
HAZARDOUS DECOMPOSITION OR BYPRODUCTS	At temperatures above the melting point metal oxide fumes may be evolved.
HAZARDOUS POLYMERIZATION	Will not occur
CONDITIONS TO AVOID	Not Applicable

SECTION VII. HEALTH HAZARD DATA

ROUTE(S) OF ENTRY	Inhalation: Yes	Skin: Yes	Ingestion: Yes
HEALTH HAZARDS (Acute and Chronic)	Exposure to the solid form of this product presents few health hazards in itself. Normal handling or processing of this material may result in the generation of tin and copper dusts and/or fumes, which may present a health hazard.		
CARCINOGENICITY	NTP: No	IARC MONOGRAPHS: 2B	OSHA REGULATED: No
SIGNS AND SYMPTOMS OF EXPOSURE	Chronic overexposure to tin can result in benign pneumoconiosis (stannosis). This form of pneumoconiosis produces progressive x-ray changes of the lungs as long as exposure exists, but there is no distinct fibrosis, no evidence of disability and no special complicating factors. Acute overexposure to tin can cause irritation of the eyes, skin, mucous membranes and respiratory system. Membrane acute overexposure to copper dusts or fumes can cause metal fume fever with flu-like symptoms such as metal taste, dry throat, coughing, fever and chills, tight chest, dyspnea, headache, blurred vision, back pain, nausea, vomiting, fatigue,. Symptoms usually disappear within 24 hours. Copper may cause skin and hair discoloration. Inhalation of copper dusts may cause changes in the gums and mucous lining of the mouth which is generally attributable to localized tissue effect rather than general toxicity.		
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE	Pre-existing conditions of the lungs. Wilson's Disease (Genetic Trait)		

EMERGENCY AND FIRST AID PROCEDURES

Skin: Normal hygiene procedure – wash with soap and water. If rash develops get medical attention.
Eyes: Flush well with running water to remove particulate. If irritation persists get medical attention.

SECTION VIII. PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED 1. Material in dust form, minimize exposure. Clean up using dustless methods (i.e. vacuum). Do not use compressed air. 2. Place in closed labeled containers for recycling or disposal. 3. Keep out of waterways. Note: cleanup personnel should wear protective clothing and respiratory protection where significant dust/fume exposure exists.

WASTE DISPOSAL METHOD May have value on a recycled basis. If disposed of, dispose of in a permitted disposal site in accordance with all federal, state, and local disposal or discharge regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Practice good housekeeping procedures to prevent dust accumulations. Keep material dry. Avoid storage near incompatible materials (see section VI). Keep product away from children and their environment.

OTHER PRECAUTIONS Special attention is drawn to the requirements of the U.S. OSHA Respirator (1910.134) should airborne exposures exceed the U.S. OSHA PEL.

SECTION IX. CONTROL MEASURES

RESPIRATORY PROTECTION (Specific Type)	Respiratory protection is required where airborne exposures exceed U.S. OSHA/ACGIH permissible air concentrations.
VENTILATION	Adequate
LOCAL EXHAUST	For small enclosed work areas
MECHANICAL (General)	Adequate for storage
PROTECTIVE GLOVES	Not required for normal handling
EYE PROTECTION	Safety Glasses
OTHER PROTECTIVE CLOTHING OR EQUIPMENT	Not required for normal handling
WORK/HYGIENIC PRACTICES	N/A

SECTION X. NFPA HAZARD CODES – HMIS RATING

HEALTH:

FIRE:

REACTIVITY: