

Safety Data Sheet

1 Manufacturer Information

Company Name	Ku Ping Enterprise Co.,Ltd		
Address	.LANE 302,HSIN SHUH RD.,HSIN CHUANG CITY,TAIPEI HSIEN,TAIWAN,R.O.C		
Person in charge	Tony Yang		
Emergency Pone #	+886-2-82013987-9	Fax #	+886-2-82012388/82012368
Item Name	Solder		
Alloy composition	Lead-free Sn99.2/Ag0.1/Cu2.3/Sb0.3(MT303AC)		

2 Hazards Identification

<i>Physical State and Appearance</i>	Solid		
<i>Emergency Overview</i>	Warning !		
	Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.		
<i>Routes of Entry</i>	Inhalation.Ingestion.		
<i>Potential Acute Health Effects</i>	<i>Eyes</i>	May be causing irritant in case of eye contact	
	<i>Skin</i>	This product may be hazardous in case of skin contact (irritant, sensitizer). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.	
<i>Potential Chronic Health Effects</i>	<i>Inhalation</i>	Fumes and/ or dusts produced by this product may be hazardous in case of inhalation.	
		Chronic effects: Fumes and /or dusts produced by this product may be hazardous in case of ingestion, of inhalation.	
		This product may be hazardous in case of skin contact (irritant, sensitizer), of eye contact (irritant). Non-corrosive for skin. Non-permeator by skin.	
			
<i>Medical Conditions Aggravated by Overexposure</i>	Repeated or prolonged exposure is not known to aggravate medical condition.		
<i>Overexposure/ Signs/ Symptoms</i>	N/A		

3 Hazardous Ingredients

Hazardous Components								
Common Name	Chemical Formula	weight %	CAS. No.	TWA	STEL	CEILING	LD 50	LC 50
Tin	Sn	97.3	7440-31-5	2	4	N/A	N/A	N/A
Silver	Ag	0.1	7440-22-4	0.01	0.03	N/A	N/A	N/A
Copper	Cu	2.3	7440-50-8	0.2	N/A	N/A	N/A	N/A
Antimony	Sb	0.3	7440-36-0	0.5	1.5	N/A	N/A	N/A
PEG		95	2532-68-3					
INORGANIC	-	5	12125-02-09		N/A	N/A	N/A	N/A

4 First Aid Measures

<i>Eye Contact</i>	Check for and remove any contact lenses. In case of
	contact, immediately flush eyes with plenty of water
	for at least 15 minutes. Get medical attention.
<i>Skin Contact</i>	In case of contact, immediately flush skin with plenty of
	water for at least 15 minutes while removing
	contaminated clothing and shoes. Cover the irritated skin
	with emollient. Wash clothing before reuse. Thoroughly
<i>Hazardous Skin Contact</i>	clean shoes before reuse. Get medical attention.
	Wash with a disinfectant soap and cover the
	contaminated skin with an anti-bacterial cream. Seek
<i>Inhalation</i>	medical attention.
	If inhaled, remove to fresh air. If not breathing, give
	artificial respiration. If breathing is difficult, give oxygen.
<i>Hazardous Inhalation</i>	Get medical attention.
<i>Ingestion</i>	Do NOT induce vomiting unless directed to do so by
	medical personnel. Never give anything by mouth to an
	unconscious person. If large quantities of this material
	are swallowed, call a physician immediately. Loosen
<i>Hazardous Ingestion</i>	tight clothing such as a collar, tie, belt or waistband.
<i>Notes to Physician</i>	
N/A	

5 Fire Fighting Measures

<i>Suitable extinguisher</i>	Dry powdered type
<i>Under high-temperature condition, do not use water</i>	Not applicable.
<i>Fire fighters must wear special protective equipment</i>	

6 Accidental Release Measures

<i>Small Spill and Leak</i>	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<i>Large Spill and Leak</i>	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7 Handling and Storage

<i>Handling</i>	Avoid contact with eyes. Avoid prolonged or repeated contact with skin.
	Wash thoroughly after handling.
<i>Storage</i>	Keep container tightly closed. Keep container in a cool, well-ventilated area.

8 Exposure Controls, Personal Protection

<i>Engineering Protection</i>		Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits
		If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
<i>Personal Protection</i>	<i>Eyes</i>	Splash goggles.
	<i>Body</i>	Lab coat.
	<i>Respiratory</i>	Dust respirator. Be sure to use an approved/ certified respirator or equivalent. Wear appropriate respirator when ventilation.
	<i>Hands</i>	Gloves.
	<i>Feet</i>	Not applicable.
<i>Note: Suggested protective clothing may not be adequate for a specific process. Consult a specialist before using.</i>		
<i>Personal Protection in case of a large Spill</i>		Splash goggles. Full Suit. Dust respirator. Boots. Gloves.
		A self contained breathing apparatus should be used to
		avoid inhalation of the product. Suggested protective
		clothing might not be sufficient; consult a specialist
		BEFORE handling this product.

9 Physical and Chemical Properties

Physical State and Appearance	Solid grey color
Smell	Odorless
Chemical Formula	Not applicable.
pH(1% Soln/ Water)	Not applicable.
Acid Value	Not available.
Boiling/ Condensation Point	Not available.
Melting/ Freezing Point	225°C
Critical Temperature	Not available.
Vapor Pressure	Not applicable.
Vapor Density	Not available.
Volatility	Not available.
Odor Threshold	Not available.
Odor	Not available.
Taste	Not available.
Color	sliver-grey.
Specific Gravity	7.38 (water =1)
Evaporation Rate	Not available.
VOC	Not available.
Viscosity	Not available.
LogKow	The product is insoluble in water and oil.
Ionicity (In Water)	Non-ionic
Dispersion Properties	Is not dispersed in cold water, hot water, methanol, diethyl ether, n-octanol, acetone.
Solubility	Insoluble
Physcial Chemical Comments	Not available.

10 Stability and Reactivity

Stability and Reactivity	This product is stable.
Conditions of Instability	Stable in normal conditions. Over melting point, will emit toxic tin oxides. (Tin)
Incompatibility with Various Substances	Slightly reactive with oxidizing agents, acids, moisture.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Will not occur.
Corrosivity	Not considered to be corrosive for matals and glass according to our database.
Special Remarks on Corrosivity	Not available.

11 Toxicological Informaiton

Toxic and Chronic Effects on Humans	Fumes and/or dusts produced by this product may be hazardous in case of ingestion, of inhalation. This product may be hazardous in case of skin contact (irritant, sensitizer), of eye contact (irritant). Non-corrosive for skin. Non-permeator by skin.	
	MUTAGENIC EFFECTS: Not available.	
	TERATOGENIC EFFECTS : Not available.	
	DEVELOPMENTAL TOXICITY: Not available.	
	The product may be toxic to kidneys, lungs, liver, mucous membranes, upper respiratory tract, skin, eye, lens or cornea.	
Toxicity to Animals	Repeated or prolonged exposure to the substance can produce target organs damage.	
LD50: N/A		
LC50: N/A		
Special Remarks on Chronic Effects on Humans	Prolonged and repeated exposure to tin oxyde fumes may result in benigne pneumoconiosis (stannosis). (Tin)	
Chronic Effects on Humans	N/A	
	Developmental Toxicity: N/A	
Special Remarks on Other Toxic Effects on Humans	MOLTEN METAL can cause severe Burns!	
	Fumes and dust may irritate eyes, digestive system and respiratory tract. (Tin)	
Special Remarks on Toxicity on Animals	No additional remark	

12 Ecological Information

Ecotoxicity	Unkown
BOD5 and COD	Unkown
Biodegradable/ OECD	Unkown
Mobility	
	Possibly hazardous short term degradation products are not likely.
	However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation	N/A

13 Disposal considerations

Waste Information	Waste must be disposed of in accordance with federal, state and
	local environmental control regulations.
Waste stream	N/A
Consult your local or regional authorities.	

14 Transport Information

UN Number : None	
UN Transportation name: IATA-Dangerous goods regulations	
Clasification: Non-DOT restrictive material	
Packing class: None	
Ocean pollution: No	
Special transport methods and remarks: N/A	

15 Regulatory Information

<i>Compliant to Labor /Sanitary Regulations</i>
<i>Standards of labor working environment regulating air density of hazardous materials</i>
<i>Standards of waste handling and storage</i>
<i>Identification rules on hazardous materials</i>
<i>Safety rules of road transportation</i>

16 Other Information

Company	Ku Ping Enterprise Co.,Ltd
Person in Charge	Tony Yang
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DATE	2019/6/10