## **Material Safety Data Sheet**

#### 1 Product Information

Item Number	170457 / 209075
Item Description	Solder Tube, 0.031"DIA, 15' Long / Solder Roll, 99.3tin.7copper with ROHS Compliant
Alloy composition	Sn99.3 / Cu0.7

### 2 Hazardous Ingredients

Hazardous Components								
Common Name	Chemical Formula	weight %	CAS. No.	TWA	STEL	CEILING	LD 50	LC 50
Tin	Sn	99.3	7440-31-5	2	4	N/A	N/A	N/A
Silver	Ag		7440-22-4	0.01	0.03	N/A	N/A	N/A
Copper	Cu	0.7	7440-50-8	0.2	N/A	N/A	N/A	N/A
Stibium	Sb		7440-36-0	0.5	1.5	N/A	N/A	N/A

#### 3 Hazards Identification

Physical State and Appearance	Solid		
Emergency Overview	Warning!		
	Avoid contact with eyes. Avoid prolonged or repeated		
	contact with skin. Wash thoroughly after handling.		
D 45			
Routes of Entry	Inhalation.Ingestion.		
Potential Acute Health Effects Eye	This product may be hazardous in case of eye contact		
	( irritant ).		
Ski	This product may be hazardous in case of skin contact		
	( irritant, sensitizer). Skin inflammation is characterized		
	by itching, scaling, reddening, or, occasionally, blistering.		
Inhalatio	Fumes and/ or dusts produced by this product may be		
	hazardous in case of inhalation.		
Ingestic	This product may be hazardous in case of ingestion.		

Potential Chronic Health Effects	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.
Medical Conditions Aggravated by Overexposure	Repeated or prolonged exposure is not known to
	aggravate medical condition.
Overexposure/ Signs/ Symptoms	Not available.

#### **4 First Aid Measures**

Eye Contact	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.		
Skin Contact	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		
	clean shoes beofre reuse. Get medical attention.		
Hazardous Skin Contact	Wash with a disinfectant soap and cover the		
	contaminated skin with an anti-bacterial cream. Seek		
	medical attention.		
Inhalation	If inhaled, remove to fresh air. If not breathing, give		
	artificial respiration. If breathing is difficult, give oxygen.		
	Get medical attention.		
Hazardous Inhalation	Not available.		

Ingestion	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
	tight clothing such as a collar, tie, belt or waistband.
Hazardous Ingestion	Not available.
Notes to Physcian	Not available.

#### **5** Fire Fighting Measures

Flammability of the product	Non-flammable.
Auto-Ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substance	Not applicable.
Explosion Hazards in Presence of Various Substa	w Non-explosive in presence of open flames and sparks, of shocks.
Fire Fighting Media and Instructions	Not applicable.
Protective Clothing ( Fire )	Not applicable.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

#### **6 Accidental Release Measures**

Small Spill and Leak	Use approprite 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.		
	<u> </u>		
Large Spill and Leak	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

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

#### **8 Exposure Controls, Personal Protection**

Engineering Protection	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.		
Personal Protection Eyes	Splash goggles.		
Body	dy Lab coat.		
Respiratory	Dust respirator. Be sure to use an approved/ certified respirator or		
	equivalent. Wear appropriate respirator when ventilation.		
Hands	Gloves.		
Feet	Not applicable.		
Note: Suggested protective clothing n	nay not be adequate for a specific process. Consult a specialist before using.		
Personal Protection in case of a large	e Spill 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
Molecular Weight	Not applicable.
Chemical Formula	Not applicable.
pH(1% Soln/ Water )	Not applicable.

Acid Value	Not available.
Boiling/ Condensation Point	Not available.
Melting/ Freezing Point	217~218°C (422.6~424.4°F)
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 in cold water, hot water, methanol,
	diethyl ether, n-octanol, acetone.
	<del>-</del>
Physcial Chemical Comments	Not available.

# 10 Stability and Reactivity

rmal conditions. Over melting point, xic tin oxides. ( Tin )  etive with oxidizing agents, acids, moisture.
ctive with oxidizing agents, acids, moisture.
le.
cur.
red to be corrosive for matals and glass
our database.

# 11 Toxicological Information

Toxic and Chronic Effects on	Fumes and/or dusts produced by this product may be hazardous in
Humans	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.
	Repeated or prolonged exposure to the substance can produce target organs dar
Toxicity to Animals	LD50: N/A
	LC50: N/A
Special Remarks on Chronic	Prolonged and repeated exposure to tin oxyde fumes may result in
Effects on Humans	benigne pneumoconiosis ( stannosis ). ( Tin )
Chronic Effects on Humans	N/A
	Developmental Toxicity: N/A
Special Remarks on Other	MOLTEN METAL can cause severe Burns!
Toxic Effects on Humans	Fumes and dust may irritate eyes, digestive system and respiratory
	tract. ( Tin )
Special Remarks on Toxicity	No additional remark
on Animals	-

#### **12 Ecological Information**

Ecotoxicity	Not available
BOD5 and COD	Not available
Biodegradable/ OECD	Not available
Mobility	Not available
	Possibly hazardous short term degradation products are not likely.
	However, long term degradation products may arise.

Toxicity of the Products of Biodegration	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation	Not available.

### 13 Disposal considerations

Waste Information	Waste must be disposed of in accordance with federal, state and
	local environmental control regulations.
Waste stream	Not available.
Consult your local or regio	nal authorities.

#### 14 Transport Information

DOT Classification	Not a DOT controlled material ( United States ).	
Special Provisions for	Not applicable	
IMO/ IMDG Classification	Not controlled under IMDG	
Marine Pollutant	Not available.	
ADR/RID Classification	Not controlled under ADR	
ICAO/ IATA Classification	Not controlled under IATA.	

#### **15 Regulatory Information**

HCS	Class: Sensitizing substance
HCS Classification	Class: Target organ effects.
International Regulations	Not available
EINECS	36/38-Irritating to eyes and skin.
DSCL ( EEC )	43-May cause sensitization by skin contact.
International Lists	No products were found.