

Product and Company Identification

Product Series : Sn42Bi57Ag1

Proposed use/Restrictions on the Use :

Electronics and semiconductor components, welding alloys

Manufacturer : Caplinq Europe BV

Address : Industrieweg 15C, 1566JN, Assendelft, Netherlands


Telephone : +3120893224

Fax: NA

Effective date : 2019/01/18 (Validity : 3 years)

Hazard Identification

Items Hazard Classification : Specific target organ systemic toxicity following repeated exposure.
(Hazard category 2)

Labeled Content	
Label Format	Health Hazards.
Warnings	Warning.
Hazard warning message	<ol style="list-style-type: none"> 1. Ingestion of harmful. 2. Harmful to the aquatic life.
Hazard prevention measures	Please wear masks and gloves to avoid the inhalation of smoke and dust during operation. Be sure to wash your hands with soap after operation or before eating.
Taint Path	Inhalation、 Skin Contact、 Eye Contact、 Ingestion
Environmental Hazards	Not applicable.

Explosion Risk	Not applicable.
Other Hazard : No relevant document.	

Component Identification Information

Pure material: Mixture

Chemical Properties :		
Chinese and English names of The hazardous ingredients	Concentration or concentration ranges (% of contents)	
	Sn42Bi57Ag1	CAS NO.)
Tin	42± 2	07440-31-5
Bismuth	Balance	
Silver	1 ± 0.2	07440-22-4

First Aid Measures

First Aid Methods for Different Exposure Pathways :	
Inhalation	Remove to fresh air. If not breathing, have a trained individual administer oxygen. Get medical attention immediately
Skin Contact	Wash contaminated skin with non-abrasive soap and running water. Remove contaminated clothing. Get medical attention if skin irritation.
Eye Contact	Check for and remove any contact lenses, immediately flush with plenty of water for at least 15 minutes and get medical attention
Ingestion	Induce vomiting by the medical staff instructions.

The Most Important Symptoms and Hazardous Effect :

Irritation and excessive exposure to hot steam cause pulmonary edema.

Protection for First-aid Personnel :

Wear gas masks, oxygen cylinders and protective clothing for First-aid personnel.

Prompt to Doctor :

Silver and inorganic compounds are neurotoxicants, they maybe bring peripheral nervous diseases.



Fire Fighting Measures

Suitable Extinguishing	Carbon dioxide, extinguishing powder or water spray.
Special dangerous that may encounter while fire fighting	No relevant document.
Special fire fighting procedure	Not suitable.
Special safety equipment fire	No relevant document
Hazardous properties	Not suitable.
Hazardous combustion products	Not suitable.

Accidental Release Measures

Personal precautions	Avoid inhalant soldering exhaust gas or dust.
Environmental precautions	Don't spread over the area.
Clean-up methods	Pump the air or water spray.

Handling and Storage

Handling	Keep 20 cm when soldering. The fumes produced during soldering should be extracted away from the breathing zone of the operators, use in a well-ventilated area. When using, avoid contact or breathing. Do not eat, drink or smoke. Thoroughly wash hands with soap and water after handling. Good industrial hygiene practices should be followed.
Storage	Store in a cool, well-ventilated area away from incompatible substances. Store in a tightly sealed container



Exposure Prevention Measures

Engineering Control : Provide adequate mechanical exhaust.					
Monitoring method : Not applicable.					
Control Parameters :					
Allowable Concentration	Element	TLV <input type="checkbox"/> PEL <input type="checkbox"/>			Other
		TWA 8	STEL	Ceiling	
	Sn	2.0 mg/m ₃	4.0 mg/m ₃	---	
	Bi	---	---	---	
	Ag	0.1 mg/m ₃	0.03 mg/m ₃	---	
Biological Indicators	Not applicable.				
Personal Protection Equipment :					
Respiratory	Wear a HIOSH approved respirator to avoid over exposure HIOSH				
Hands	Suitable gloves				
Eyes	For handling: wear safety glasses with side shields. For melting, wear goggles and face shields. Don't wear contact lenses.				
Skin and Body	Wear coveralls and protective gloves. Inspect gloves before using.				
Ambulance staff protection	Wear gas masks, oxygen cylinders and protective clothing.				
Other precautions	Forbid eating, drinking, smoking and make up in the workplace.				
Hygiene practices : Thoroughly wash exposed areas with soap and water before leaving work, eating, drinking and smoking.					

Physical and Chemical Properties



Appearance : Silver-white metal	Odor : Odorless
Olfactory Threshold : Not applicable	Melting Point : 138 °C
pH : Not applicable	Flash Point : Not applicable Test Methods : Not applicable
Flammability : Not applicable	Boiling/Boiling Point Range : Not applicable
Resolve Temperature : Not applicable	Heat of Combustion (kJ/mol) : Not applicable
Auto Ignition Temperature : Not applicable	Explosion Limit : Not applicable
Vapor Pressure : Not applicable	Vapor Density : Not applicable
Density : 7.4 g/cm ³	Ignition Temperature : Not applicable
Solubility : Insoluble in water	Evaporation Rate : Not applicable
Octanol / Water Partition Coefficient Values : Not applicable	

Stability and Reactivity

Chemical Stability : Stable under room temperature and pressure.
Special circumstances of the hazard Reaction : Not applicable.
Conditions to Avoid : Contamination. Contact with air or water.
Materials to Avoid : Avoid oxidizing agents, acids, peroxides, moisture, chlorine, alkalies.
Hazardous decomposition products : Not applicable.
Belongings against : Not applicable.

Toxicological Information

Route of Exposure :				
Acute Toxicity	LD ₅₀	LD ₅₀ 24h	LD ₅₀	
	NA	NA	NA	NA



Symptoms :

Coughing, difficulty breathing, headache, nausea, vomiting.

Chronic Toxicity or Long-term Toxicity : No relevant document.

Induced sensitivity : NA

Irritation : NA

Induced mutation : NA

Teratogenicity : NA

Reproductive toxicity : NA

Specific target organ systemic toxicity : NA

Other : NA

Ecological Information

Eco-toxicity :

LC50(Fish) : NA

EC50(Aquatic invertebrates) : NA

biological Concentration factor (BCF) : NA

Bioaccumulation : NA

Persistence and Degradability : NA

Biodegradable : NA

Non-biodegradable : NA

The Mobility in soil : NA

Other Adverse Effects NA

Disposal Considerations

Disposal Considerations :

To comply with relevant government laws and regulations dealing with.

Transportation Information

UN. No : NA

The United Nations shipping name : NA
Transportation hazard classification : NA
Packing : NA
Marine pollutant : NA
Special Shipping and Notes : NA

Regulatory Information

Applicable Laws and Regulations :
1. Occupational safety and sanitation rules.
2. Hazards and hazardous materials rules of Liberal Studies.
3. Labor working industry in ambient air concentrations of hazardous materials to allow the standard.
4. Road Traffic Safety Rules.
5. Industrial Waste Management Methods for storage clearance office and Facilities Standards.

Other Information

References	1.AIR PRODUCTS MSDS、INTERNATIONAL MARITIME DANGEROUS GOODS CODE 2.MSDS Library, CCINFO, 9 9 -2, 2006-1 3.RTECS Library, TOMES PLUS, Vol.68, 2006 4.HSDS Library, TOMES PLUS, Vol.68, 2006	
Prepared by	Position : Quality	Name (Signature) : R. De Schepper
Tabulated Date	2018/01/18 (Validity:3 years)	Edit Description 1. NA
Other message	NA	

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