SAFETY DATA SHEET
Asahi Cored Lead Free Solder Wire
SCS7 (Core Flux : CLF5023)

SDS #: EHC 2 – 17/28

Date of Preparation: December 2021

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

1.1 Product Details:

Product Name : Asahi Cored Flux Lead-Free Solder Wire
Trade Name : Asahi Cored Flux Lead-Free Solder Wire SCS7 (Core Flux : CLF5023)
Use : Cored flux solder wire may be used for manual soldering or in repair and rework for electrical or electronic assemblies.

1.2 Company's Identification:

Manufacturer's Name and Address : Singapore Asahi Chemical & Solder Industries Pte Ltd
47 Pandan Road
Singapore 609288

Telephone : (65) 6262-1616
Facsimile : (65) 6261-6311

1.3 Contact Point:

Designation : Chemist
Emergency Telephone Number : (65) 6262-1616

SECTION 2: HAZARD IDENTIFICATION

GHS classification

Acute Toxicity	- Oral	: Classification 4
	- Inhalation	: Classification 4
Sensitization	- Skin	: Classification 1
	- Respiratory	: Classification 1

GHS label elements

GHS Signal Word **: Danger**

GHS Hazard Statement:

H302	Harmful if swallowed
H332	Harmful if inhaled
H317	May cause an allergic skin reaction
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled

GHS Precautionary Statement:

Prevention

P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust, fume, gas, mist and vapours.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves.
P285	In case of inadequate ventilation wear respiratory protection.

Response

P301, P312, P330	IF SWALLOWED: Rinse mouth, call a POISON CENTER or doctor/physician if you feel unwell.
P302, P352	IF ON SKIN: Wash with plenty of soap and water.
P304, P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P333, P313	If skin irritation or rash occurs: Get medical advice or attention.
P342, P311	If experience respiratory symptoms: Call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.

Storage

P410	Protect from sunlight.

Disposal

P501	Dispose of contents or container to appropriate waste site in accordance with local and national regulations.

Other Hazards Intake of tin may cause vomiting, diarrhea and depression of the central nervous system with symptoms like fatigue, headache and ataxia. Inhalation of soldering fumes may cause irritation to the respiratory tract and may lead to central nervous system

effects (drowsiness, dizziness, headache and nausea).

Effect on Environment : No relevant information found.

SECTION 3: COMPOSITION/INFORMATION ON MATERIAL

Chemical Name	CAS No.	%	OSHA PEL (mg/m^3)	ACGIH TLY (mg/m^3)	Other Limits Recommended
Tin (Sn)	7440-31-5	REM	2.0	2.0	
Copper (Cu)	7440-50-8	0.5 – 0.7	Fumes 0.2 Dust/Mist 1	0.2 1	
Silicon (Si)	7440-21-3	0.01 - 0.03	10	10	
Resin	8050-09-7	2.0 – 3.5			
Activators	Proprietary	0.1 – 0.3			
Solvent	Proprietary	0.1 – 0.3			
Total		**100**			

SECTION 4: FIRST AID MEASURES

Ingestion : Seek medical attention.
Eye Contact : Flush eyes with plenty of water immediately for at 15 minutes. Seek medical attention.
Skin Contact : Wash thoroughly with soap and warm water.
Inhalation : Evacuate to a safe area with fresh air.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media : NA
Fire Fighting Instructions : NA
Special Hazards : NA
Unusual Fire and Explosion Hazards : Flux may burn if soldering is done with a flame.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Leak/Spill : Place into properly labeled waste container and may be sent for recovery following appropriate recovery routes or methods.

SECTION 7: HANDLING AND STORAGE

Handling : Wash hand thoroughly with soap and water prior to eating, drinking or smoking. Do not smoke while soldering. Avoid

inhalation of vapors and contact with skin and eyes. Observe good industrial practices.

Storage : Store in a cool environment away from oxidizing agents. Protect from sunlight.

SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION

Engineering Measures : Maintain general or local exhaust ventilation to meet exposure limit requirements.
Personal Protection : Operator should be protected from soldering fumes
PROTECTIVE GLOVES : Impervious rubber
EYE PROTECTION : Safety glasses

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Metallic coil with flux in the center of the coil.
Odor	: No odor.
Solubility in water:	: Soluble (flux)
Boiling Point(°C)	: NA (solder); 124°C (flux)
Melting Point(°C)	: 227°C (solder)
Vapor Pressure(mm of Hg at 20°C)	: NA
Vapor Density (air=1)	: NA
Percentage Volatiles (by Volume)	: NA
Volatile Organic Compound (VOC)	: NA
Evaporation Rate (butyl acetate=1)	: NA
Specific Gravity (water=1 at 25°C)	: 7.30 (solder)
Flash Point (°C)	: NE
Auto-ignition Temperature(°C)	: NE

SECTION 10: PHYSICAL HAZARDS (STABILITY AND REACTIVITY)

Condition to avoid : Unknown
Incompatibles : Oxidizing materials
Decomposition products : Unknown
Hazardous polymerization : Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity data : The acute toxicity of tin is low.
Carcinogenicity : Not listed.
Reproductive Effect : None.
Germ Cell Mutagenicity : Not mutagenic.
Inhalation Toxicity : Inhalation of soldering fumes may cause irritation to the respiratory tract and may lead to central nervous system

effects (drowsiness, dizziness, headache and nausea).

Target Organs	:	Respiratory system
Skin corrosion/irritation	:	None.
Aspiration Hazard	:	No information.
Medical Conditions Generally Aggravated by Exposure	:	Soldering fumes may irritate the eyes.

SECTION 12: ECOLOGICAL INFORMATION

Mobility & Bioaccumulation	**:**	Non volatile material
Biodegradability	**:**	Non biodegradable
Aquatic Toxicity	**:**	Organic and inorganic tin compounds are toxic to the aquatic ecosystems. Copper inhibits algae growth.

SECTION 13: DISPOSAL INFORMATION

Dispose according to federal, state and local regulations. This product is suitable for recovery following appropriate recovery routes or methods. If in doubt, contact Singapore Asahi.

SECTION 14: TRANSPORT INFORMATION

UN Number

ADR/RID:-	IMDG:-	IATA-DGR:-

UN proper shipping name

ADR/RID	: Not dangerous goods
IMDG	: Not dangerous goods
IATA-DGR	: Not dangerous goods

Transport hazard class

ADR/RID:-	IMDG:-	IATA-DGR:-

Packaging group

ADR/RID:-	IMDG:-	IATA-DGR:-

Special shipping instruction

No data available

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
EU Regulation (EC) No. 1907/2006 (REACH)

Substances of very high concern
None of the components are listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

SECTION 16: OTHER INFORMATION

THIS INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. SUCH INFORMATION IS TO THE BEST OF THE COMPANY'S KNOWLEDGE AND BELIEVED ACCURATE AND RELIABLE AS OF THE DATE INDICATED.
HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE.

*optional
NE = Not Established
NA = Not Applicable
PEL = Permissible Exposure Level