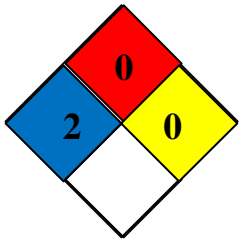

Health	2
Flammability	0
Reactivity	0
Personal Protection	E

SAFETY DATA SHEET
Asahi Cored Solder Wire
Sn60/Pb40 (Core Flux : CF-10A)

MSDS #: EHC 2 – 3/11

Date of Preparation: February 2017

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

1.1 Product Details:

Product Name : Asahi Cored Flux Solder Wire
Trade Name : Asahi Cored Flux Solder Wire Sn60/Pb40 (Core Flux : CF-10A)
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) 262-1616

SECTION 2: HAZARD IDENTIFICATION

GHS classification

Acute toxicity	
Oral	: Category 4
Inhalation	: Category 4
Carcinogenicity	: Category 2
Reproductive Toxicity	: Category 2
Specific target organ toxicity (repeated exposure)	: Category 2 (nerves, kidney, reproductive system)
Acute aquatic toxicity	: Category 1
Chronic aquatic toxicity	: Category 1

GHS label elements

GHS Signal Word **: Danger**

GHS Hazard Statement:

H303	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
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects

GHS Precautionary Statement:

Prevention

P201	Obtain special instructions before use.
P260	Do not breathe dust, fume, gas, mist, vapours and spray.
P273	Avoid releasing to the environment.
P281	Use personal protective equipment as required.
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

P308, P313, P314	IF exposed or concerned: Get medical advice or attention if you feel unwell.
P301, P312, P330	IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P391	Collect spillage.
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.

SECTION 3: COMPOSITION/INFORMATION ON MATERIAL

Chemical Name	CAS No.	%	OSHA PEL(mg/m^3)	ACGIH TLY (mg/m^3)	Other Limits Recommended
Alloy Composition:					
Tin (Sn)	7440-31-5	57.7 – 58.7	2.0	2.0	
Lead (Pb)	7439-92-1	38.3 - 39.3	0.05	0.05	
Rosin	8050-09-7	1.5 - 2.7			
Organo-halide Activator	Proprietary	0.1 - 0.3			
Lactone Activator	Proprietary	0.1 - 0.2			
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 : Dry chemical, foam and CO^2.
Fire Fighting Instructions : If large quantities are on fire SCBA should be used as toxic fumes may be emitted.
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.

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	:	Flux has a slight odor.
Solubility in water:	:	Slightly soluble (flux)
Boiling Point(°C)	:	600°C (solder); 124°C (flux)
Melting Point(°C)	:	183-191°C (solder)
Vapor Pressure(mm of Hg at 20°C)	:	NA
Vapour 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)	:	8.53 (solder)
Flash Point (°C)	:	79°C (flux)
Auto-ignition Temperature(°C)	:	NE

SECTION 10: PHYSICAL HAZARDS (STABILITY AND REACTIVITY)

Condition to avoid	:	Moisture and direct contact with flame and excessive heating.
Incompatibles	:	Oxidizing materials.
Decomposition products	:	Unknown.
Hazardous polymerization	:	May occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity data	:	Lead is toxic and will cause damage to health if ingestion.
Carcinogenicity	:	Not listed.
Reproductive Effect	:	Ingestion of lead will cause damage to the male reproductive system.
Effects of overexposure (Chronic Effect):		Breathing of vapors may produce respiratory irritation.
Target Organs	:	Respiratory system and reproductive system.

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 : Lead is toxic and expected to be harmful to aquatic organisms.

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 : NA
T.D.G. Classification : NA
Packing group : NA
Special shipping instruction : NA

SECTION 15: REGULATORY INFORMATION

a. Proposed classification : Harmful
b. Risk phrase
   R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
   R36/37/38 Irritating to the eyes, respiratory system and skin.
c. Safety phrase
   S23 Do not breath fume or vapor.
   S24/25/26 Avoid contact with skin or eyes. In case of contact with skin, rinse immediately with plenty of water.
   S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
   S59 Refer to manufacturer/supplier for information on recovery/recycling.

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