

# SAFETY DATA SHEET

The date of preparation      June 9,2015  
 Revised date                      October 29,2015

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product form                      Mixture  
 Product name                      ECO SOLDER RMA98 SUPER P3 M705  
 Product code                      CLPFC-0001

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Main use category                      General industrial products  
 Use of the substance/mixture              Soldering

#### 1.2.2. Uses advised against

Not available

### 1.3. Details of the supplier of the safety data sheet

#### Manufacturer

Senju Metal Industry Co., Ltd.  
 Senju Hashido-cho 23, Adachi-ku, Tokyo, Japan  
 Phone:+81-3-3888-5156, Fax:+81-3-3888-7127

#### Supplier

Senju Metal Europe GmbH  
 Kirchnerstrasse 6-8, 60311 Frankfurt am Main, Germany  
 Phone:+49 (0) 69 2980 150, Fax:+49 (0) 69 2980 1555

### 1.4. Emergency telephone number

Emergency phone number              +49 (0) 69 2980 150

## 2. HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids:	No classification
Acute toxicity	
Oral:	Not classified
Dermal:	Not classified
Inhalation(Gases):	No classification
Inhalation(Vapours):	No classification
Inhalation(Dusts/Mists):	Not classified
Skin corrosion/Irritation:	Not classified
Serious eye damage/eye irritation:	Not classified
Sensitization	
Respiratory:	Not classified

Skin:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
Specific target organ toxicity (Single exposure):	Not classified
Specific target organ toxicity (Repeated exposure):	Not classified
Hazardous to the aquatic environment	
Acute hazard:	Not classified
Long-term hazard:	Not classified
Hazardous to the Ozone layer:	Classification not possible

Adverse physicochemical, human health and environmental effects

Under normal handling, the risk of fire is low.

## 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard statements (CLP):

No information available

## 2.3. Other hazards

No additional information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

No information available

### 3.2. Mixture

name	Content(wt%)	REACH No.	Index No.	EC No.	Cas No.
Tin	90 ~ 100%	01-2119486474-28-0021	Not applicable	231-141-8	7440-31-5
Rosin	1 ~ 10%	Not applicable	Not applicable	266-041-3	65997-06-0
Silver	1 ~ 10%	Not applicable	Not applicable	231-131-3	7440-22-4
Copper	0.1 ~ 3%	Not applicable	Not applicable	231-159-6	7440-50-8
Tin					
Rosin					
Silver					
Copper					

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

IF INHALED:

In case volatile matter generated during processing and soldering work is inhaled and the throat and nose become irritated, move to a place with fresh air, wash the mouth and gargle, and receive the treatment of a doctor as required.

IF ON SKIN:

Wash the portion that came into contact with the product well by using soap.

First-aid measures after ingestion:

Wash inside of the mouth thoroughly with water, and receive the treatment of a doctor as required.

Wash with clean water for several minutes, and after washing thoroughly, in case the eyes are injured, or in case there is irritation, receive the treatment of a doctor as required.

4.2. Most important symptoms and effects, both acute and delayed

No information available

4.3. Indication of any immediate medical attention and special treatment needed

No information available

## 5. FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Dry chemical or disaster preventive sand

Unsuitable extinguishing media:

Water

5.2. Special hazards arising from the substance or mixture

Black smoke, the carbon monoxide, and other toxic gases are generated by pyrolysis and the incomplete combustion, and there is a possibility of danger by these inhalations.

There is a risk of generation of irritating fume or toxic fume by fire.

5.3. Advice for firefighters

Firefighting instructions:

Move mobile container immediately to safe place.

Spray water to the surrounding facilities and cool them.

Fire-fighting shall be conducted from the windward of the fire as much as possible.

Protection during firefighting:

Depending on the situation, protective equipment such as chemical cartridge respirator for fire-fighting and protective clothing shall be worn.

## 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective gloves.

6.2. Environmental precautions

Pay attention so that the product does not flow into the sewage or public water area.

6.3. Methods and materials for containment and cleaning up

Use safe tools which will not generate sparks.

Sweep up the scattered product and recover into a suitable container.

6.4. Reference to other sections

No information available

## 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Appropriate engineering controls:

Carry out equipment countermeasure and have on protective equipment following term of 「8. EXPOSURE CONTROL/PERSONAL PROTECTION」.

Local exhaust /Total ventilation:

Provide local ventilation or general ventilation following term of 「8. EXPOSURE

## CONTROL/PERSONAL PROTECTION].

## General precautions:

Make efforts to keep the working place tidy and in order, and keep away from fire.

## Precautions for safe handling:

See the disclaimer of "2. HAZARD IDENTIFICATION".

## Hygiene measures:

After work, wash hands well and gargle before smoking, eating, etc.

## 7.2. Conditions for safe storage, including any incompatibilities

## Appropriate engineering controls:

No information available

## Appropriate storage conditions:

Avoid the following to prevent thermal storage, ignition, and deterioration: (1) Direct sunlight, (2) High temperature and high humidity, and (3) Outdoor storage. Even when storing the product indoors, avoid places near incandescent lamps, mercury lamps, or other lighting equipment that will emit heat or strong ultraviolet rays. Carefully store the product and avoid piling them too high in order to prevent toppling.

## Safe containers and packaging materials:

Appropriate containers and packaging materials

## 7.3. Specific end use(s)

No information available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1. Control parameters

Tin	2(metal)mg/m3	TWA	ACGIH
Tin	2(oxide, inorganic compounds)mg/m3	TWA	ACGIH
Tin	2(inorganic compounds)mg/m3	TWA	OSHA
Silver	0.01mg/m3		Japan Society for Occupational Health
Silver	0.1(metal) mg/m3	TWA	ACGIH
Silver	0.01mg/m3	TWA	OSHA
Copper	1(dust, mist)mg/m3	TWA	ACGIH
Copper	0.2(fume)mg/m3	TWA	ACGIH
Copper	1(dust, mist)mg/m3	TWA	OSHA
Copper	0.1(fume)mg/m3	TWA	OSHA

## 8.2. Exposure controls

## 8.2.1 Appropriate engineering controls

No information available

## 8.2.2 Individual protection measures, such as personal protective equipment

## Respiratory protection:

Use a protective mask.

## Hand protective equipment:

Use protective gloves.

## Eyes / Face Protection:

Wear protective glasses.

## Skin and personal protective equipment:

Use work clothes and safety shoes as required.

## 8.2.3 Environmental exposure controls

Install equipment to wash the hands and eyes nearby.

Handling place shall be well ventilated.

Volatile matter may be generated during processing and soldering work; therefore, use a local ventilator as necessary.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1. Information on basic physical and chemical properties

Appearance/Physical state:	Solid (metal and resin)
Colour:	No data available
Odour(Odour threshold):	No data available
pH:	No data available

## Melting point/Freezing point:

Product	217-220°C(Solder)
Rosin	70-80°C

## Boiling point:

Tin	2507°C
Silver	2000°C
Copper	2324°C

## Initial boiling point:

No data available

## Boiling range:

No data available

## Flash point:

Rosin >190°C

## Auto-ignition temperature:

No data available

## Flammability (solid, gas):

No data available

## Lower flammability or explosive limits:

No data available

## Upper flammability or explosive limits:

No data available

## Vapour pressure:

Tin	1Pa(1224°C)
Copper	0.073Pa(1083°C)

## Relative vapour density:

No data available

## Relative evaporation rate:

No data available

## Specific gravity (Relative density):

Product	7.4(Solder)(Specific gravity)
Rosin	1.05g/cm <sup>3</sup>

Solubility:

No data available

Log Pow:

Copper -0.57

Decomposition temperature:

No data available

Viscosity, kinematic:

No data available

Viscosity, dynamic

No data available

Explosive properties:

No data available

Oxidising properties:

No data available

9.2. Other information

No additional information available

## 10. STABILITY AND REACTIVITY

10.1. Reactivity

No information available

10.2. Chemical stability

Stable at ordinary storage and handling conditions.

10.3. Possibility of hazardous reactions

There is fear of reacting with strong acid or strong alkali.

10.4. Conditions to avoid

Avoid contact with direct rays of the sun, and high temperature body other than soldering purpose.

10.5. Incompatible materials

Strong acid or strong alkali

10.6. Hazardous decomposition products

It decomposes by burning or high temperature, and there is possibility of generating toxic gases (black smoke, carbon monoxide, etc.)

## 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:

No information available

Skin corrosion/Irritation:

No information available

Serious eye damage irritation:

No information available

Respiratory or skin sensitization:

No information available

Germ cell mutagenicity:

No information available

Carcinogenicity:

No information available

Reproductive toxicity:

No information available

Specific target organ toxicity (Single exposure):

No information available

Specific target organ toxicity (Repeated exposure):

No information available

Aspiration hazard:

No information available

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

Fish:

No information available

Crustacea:

No information available

Algae:

No information available

### 12.2 Persistence and Degradability

No information available

### 12.3. Bioaccumulative Potential

No information available

### 12.4. Mobility in soil

No information available

### 12.5. Results of PBT and vPvB assessment

No information available

## 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Dispose of the container and wrapping material in accordance with the Law related to Disposal of Waste and Cleaning.

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

## 14. TRANSPORT INFORMATION

### 14.1. UN number

UN number:

Not applicable to the criteria for classification

- 14.2. UN proper shipping name  
UN proper shipping name: Not applicable to the criteria for classification
- 14.3. Transport hazard class(es)  
UN classification: Not applicable to the criteria for classification
- 14.4. Packing group  
Packing group: Not applicable to the criteria for classification
- 14.5. Environmental hazards  
Marine pollutant: Not applicable to the criteria for classification
- 14.6. Special precautions for user  
No information available
- 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  
Not applicable

## 15. REGULATORY INFORMATION

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- 15.1.1. EU-Regulations
- Contains no substances with Annex XVII restrictions
  - Contains no REACH candidate substance.
  - Contains no REACH Annex XIV substances
- 15.1.2. National regulations
- No additional information available
- 15.2. Chemical safety assessment
- No chemical safety assessment has been carried out.

## 16. OTHER INFORMATION

### Indication of changes:

0.0	2015.06.09
0.1	2015.10.29

### Data sources:

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

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The information contained herein is based on several references and the present state of our knowledge. However the MSDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information, and it does not represent a guarantee the properties of the product.

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