

S a f e t y D a t a S h e e t

LFSOLDER TLF - 204 - 171

Date Prepared : Jul. 19, 2013
Prepared By : S. Akaike

1.CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : LFSOLDER TLF-204-171

MANUFACTURE

Company Name : TAMURA CORPORATION
Address : 16-2, Sayamagahara, Iruma-shi, Saitama, 358-8501, Japan
Phone Number : +81-4-2934-6131
Emergency Phone Number : +81-4-2934-6134
FAX Number : +81-4-2934-6559

2.HAZARDS IDENTIFICATION

GHS Classification : Acute Toxicity - Category 4 (inhalation)
Sensitization - Category 1 (respiratory/skin)
Specific target organ toxicity (single exposure) - Category 2
Specific target organ toxicity (repeated exposure)
- Category 1,2
Aquatic toxicity - Category 3 (acute/chronic)

Labelling:

Symbol : Health hazard, Exclamation mark
Signal word : **DANGER !**
Hazard statement : May cause an allergic skin reaction.
Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause damage to respiratory system.
Causes damage to lung through prolonged or repeated exposure.
May cause damage to eyes / respiratory organs(inhalation) through prolonged or repeated exposure.
Harmful to aquatic life with long lasting effects.

Precautionary statements : Do not breathe fume/mist.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.
Wear protective gloves.

3.COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENTS			ACGIH	Other Limits
Chemical Name or Common Names	CAS No.	%	TLV-TWA	Recommended
Solder alloy				
Tin	7440-31-5	84.9	2 mg/m ³	
Silver	7440-22-4	2.6	0.1 mg/m ³	
Copper	7440-50-8	0.4	0.2 mg/m ³	
Vehicle	trade secret	12.1	N/A	
(flux ; modified resin, glycol ether, activator)				
TOTAL		100.0		

*OPTIONAL N/A : Not applicable

4.FIRST AID MEASURES

Ingestion : Get medical advice/attention if you feel unwell.

Skin : Wash with plenty of soap and water.
Call a POISON CENTER or doctor if you feel unwell.
Get medical advice/attention if skin irritation or rash occurs.
Wash contaminated clothing before reuse.

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor if inhaled/you feel unwell/
experiencing respiratory symptoms.

Eyes : Get medical advice/attention if you feel unwell.

5.FIRE FIGHTING MEASURES

Suitable extinguishers : Carbon dioxide, dry chemical, alcohol resistant foam.
Keep containers cool with spray. Do not use water jet on molten solder.

Hazardous Combustion Products : Same as the rosin core solder flux fume.

Special Equipment for Fire-Fighting : Self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Safety Precaution : Wear impervious gloves and eye protection.

Small spillage : Scrape up spilled waste to lidded container. Clean area with strong detergent or solvent. Remove to a safe place for disposal.

Large spillage : Avoid entry into drains, ditches, streams or rivers. Transfer to salvage tank if possible, otherwise treat as small spillage. Inform local authorities if contamination enters watercourses or drains.

7. HANDLING AND STORAGE

Avoid contact with skin and eyes. Observe normal standards of industrial hygiene for handling chemicals. Do not smoke, drink or eat when handling this product.

Store in a cool, dry place, preferably refrigerated. (below 10 °C)

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory : Type for organic vapors if required

Hand : Impervious gloves

Eye : Safety goggles, chemical, molten metal resistant

Skin : Overalls and boots

Hygiene measures : Always wash thoroughly after handling chemicals, especially before eating, drinking and smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Gray paste

Odor : Terpene like

pH : N/I

Melting point : 216 - 220 °C (as solder alloy)

Boiling point : > 260 °C

Flash point : > 140 °C

Vapor pressure : < 2 Pa (at 20 °C)

Relative density : 4.2 g/cm³ (at 25 °C)

Solubility in water : Insoluble

Viscosity : 190 Pa·s (at 25 °C)

*OPTIONAL N/I : No information

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions

Conditions to avoid : Fire, and conditions which allow the paste to dry out

Materials to avoid : Oxidizing agents

Hazardous decomposition products : Same as the rosin core solder flux fume products

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Ingredient name	CAS number	Test	Species	Dose	Exposure
modified resin	proprietary	LD ₅₀ Oral	Rat	>7.6 g/kg	-
		LD ₅₀ Dermal	Rabbit	2.5 g/kg	-
		LD ₅₀ Inhalation	Rat	2.3 mg/L	4 hours
silver	7440-22-4	LD ₅₀ Oral	Rat	>5.0 g/kg	-

Carcinogenicity

Classification

Ingredient name	CAS number	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
silver	7440-22-4	-	-	D	-	-	-

12. ECOLOGICAL INFORMATION

Aquatic ecotoxicity

Ingredient name	CAS number	Test	Result	Species	Exposure
modified resin	proprietary	Intoxication	Acute EC ₅₀ 4.5 mg/L	Daphnia magna	48 hours

13. DISPOSAL CONSIDERATIONS

Solder paste and empty containers with residues must be regarded as "Special Waste" for disposal.

Disposal should be via an authorized contractor to an approved site, observing all local and national regulations.

14. TRANSPORT INFORMATION

Information approved for the carriage of dangerous goods.

UN Number : N/A
 Proper shipping name :
 Class :
 Packing Group :

15. REGULATORY INFORMATION

HS Code : 3810.10

16. OTHER INFORMATION

Legal disclaimer : The information contained in this data sheet does not constitute an assessment of workplace risks. The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith, no warranty is implied with the respect to the quality or the specification of the product. The user must satisfy himself that the product is entirely suitable for his purpose.