

Material Safety Data Sheet

LFSOLDER TLF - 204 - 111M

Date Prepared : May 19, 2005
Prepared By : T. Ono

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : LFSOLDER TLF-204-111M
CAS Number : -
MSDS Number : -

*Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

MANUFACTURE

Company Name : TAMURA KAKEN 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. COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENTS		OSHA	ACGIH	Other Limits
Chemical Name & Common Names	%	PEL	TLV	Recommended
Solder alloy				
Tin	86.1	N/I	2 mg/m ³	
Silver	2.7	N/I	0.1 mg/m ³	
Copper	0.4	N/I	0.2 mg/m ³	
Vehicle (flux ; modified rosin, glycol ether)	10.8	N/I	N/I	
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Non-Hazardous Ingredients				
TOTAL	100.0			

*OPTIONAL N/I : No information
N/A : Not applicable

3. HAZARDS IDENTIFICATION

Inhalation : Fume from the soldering process may cause irritation to the respiratory tract and in some cases, asthma.

Skin / Eye contact : Irritating to the skin and possible sensitization on prolonged exposure. Irritating to the eyes, possible abrasive effect. Possible corneal damage which, if not treated promptly, could result in permanent impairment of vision.

Ingestion : Harmful if taken internally for prolonged periods. A single exposure may cause irritation, nausea, discomfort, headache and weakness.

Long term effects : Danger of cumulative effects. Symptoms include digestive disturbances, pallor, anemia, blue line on gums. Sustained skin contact of many hours may cause severe redness and swelling with the development of fissures bleeding.

4. FIRST AID MEASURES

Skin : Wash affected area with soap and water.

Eyes : Wipe away loose material, irrigate with water for at least 10 minutes and seek medical attention.

Inhalation : Remove from exposure, rest and keep warm. In severe cases, or if recovery is not rapid or complete, seek medical attention.

Ingestion : Wash out mouth with water. Do not induce vomiting. If patient is conscious, give water to drink. If patient feels unwell, seek medical attention.

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

Boiling point : > 260 °C

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

Flash point : > 140 °C

Vapor pressure : < 2 Pa (at 20 °C)

Solubility in water : Insoluble

Density : Approx. 4.2 g/cm³ (at 20 °C)

pH : N/I

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

When inhaled, rosin based solder flux fume can cause asthma. On contact with skin, both the flux and its fume may cause dermatitis.

12. ECOLOGICAL INFORMATION

No information available.

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.

Proper shipping name : N/A
UN Number : N/A
Classification : N/A

15. REGULATORY INFORMATION

Please refer to national measures that may be relevant.

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.