

# Material Safety Data Sheet

According to (EC) No 1907/2006

## Resin Paste Flux

E

### 1. Identification of the Preparation and of the Company

**Trade Names:** 6-409; 6-410; 6-411; 6-412; 6-413; 6-418; 6-4312; 6-432, 200, 300, and 500 series; SP Series Resin Fluxes  
**Synonyms:** Water Soluble Solder Paste, Solder Cream, SolderPlus<sup>®</sup>, PrintPlus<sup>®</sup>  
**Manufacturer:** EFD Inc.  
 40 Catamore Boulevard  
 East Providence, RI 02914, USA  
 Phone: +1-401-431-7000  
**Emergency:** Chemtrec (Transportation) +1-800-424-9300  
 Outside USA +1-703-527-3887

### 2. Composition/Information on Ingredients

Component	CAS	EINECS	% by Weight	OSHA PEL mg/m <sup>3</sup>	ACGHV TLV mg/m <sup>3</sup>
Resin	65997-06-0	266-041-3	0.0-50.0	NE	NE
Tridecyl alcohol	68526-86-3	271-235-6	0.0-50.0	NE	NE
Alpha terpineol	98-55-5	202-680-6	1.0-100.0	NE	NE
Petrolatum	8009-03-8	232-373-2	0.0-50.0	NE	NE
Organic thixotrope	Mixture	Mixture	0.5-4.0	NE	NE
Activator	Mixture	Mixture	0.0-15.0	NE	NE

NE = Not Established

### 3. Hazard Identification

**GENERAL:** Fumes generated during soldering are irritating to the eyes and may cause headache and respiratory system irritations or damage. Inhalation or ingestion may produce nausea, vomiting, headache or joint and muscle pain. May cause skin or eye irritation.

**EYE CONTACT:** May cause mild eye irritation.

**SKIN CONTACT:** May cause mild skin irritation. Prolonged contact may cause sensitization. Hot, molten solder may cause serious burns.

**INHALATION:** Inhalation hazard is low. May cause nausea, vomiting, headache.

**INGESTION:** Ingestion may cause damage.

### 4. First Aid Measures

**EYES:** Remove contact lenses. Immediately flush with copious amounts of water for at least 15 minutes. Seek medical attention.

**SKIN:** Wash affected area with plenty of warm, soapy water. If irritation develops, seek medical attention. Do not try to remove cooled rosin from skin. Seek medical attention.

**INHALATION:** Remove person to fresh air. If breathing has stopped, perform artificial respiration and seek medical attention.

**INGESTION:** If person is conscious, give large quantity of water to drink. Do not induce vomiting. Seek immediate medical attention. Harmful if swallowed.

### 5. Fire Fighting Measures

**EXTINGUISHING MEDIA:** Dry chemical, foam, CO<sub>2</sub>.

**UNSUITABLE EXTINGUISHING MEDIA:** Water.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Flux may burn if soldering is done with a flame.

**FIRE FIGHTING EQUIPMENT:** If large quantities of solder are on fire, breathing apparatus should be used, as toxic fumes may be emitted.

**PRECAUTIONS:** Keep away from ignition sources. Use with adequate ventilation.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May form carbon monoxide, carbon dioxide or other toxic fumes.

### 6. Accidental Release Measures

**PERSONAL PRECAUTIONS:** Wear appropriate personal protection equipment (refer to Section 8.)

**ENVIRONMENTAL PRECAUTIONS:** Keep out of sewers and waterways.

**METHODS FOR CLEANING:** Collect and place into properly labeled waste container. Dispose of according to applicable government regulations.

### 7. Handling and Storage

**HANDLING:** Avoid inhalation of fumes and vapor. Avoid contact with eyes, skin and clothing. Keep away from children. For industrial use only. Wash hands thoroughly after handling before eating, drinking or smoking.

**STORAGE:** Store in a cool, dry place and away from heat or open flame. Keep container closed. Do not store with foodstuffs.

### 8. Exposure Controls/Personal Protection

**ENGINEERING MEASURES:**

Maintain adequate local ventilation. Operators should be protected from soldering fumes.

**PERSONAL PROTECTIVE EQUIPMENT:**

**EYES:** Wear appropriate safety glasses.

**SKIN:** Wear appropriate protective clothing and impervious rubber gloves. Avoid skin contact. Workers should wash hands thoroughly before eating, drinking or smoking.

**INHALATION:** Use with adequate ventilation.

**HYGIENE:** Eating, drinking and smoking should not be permitted in areas where soldering is done. Do not store foodstuffs with solder.

### 9. Chemical and Physical Properties

<b>APPEARANCE AND ODOR:</b>	Amber gel or liquid with a mild odor
<b>FLASH POINT:</b>	>111°C (COC)
<b>FLAMMABILITY:</b>	Not established
<b>AUTO IGNITION TEMPERATURE:</b>	Not established
<b>pH:</b>	Not applicable
<b>VAPOR PRESSURE:</b>	Not established
<b>VAPOR DENSITY:</b>	Not established
<b>MELTING POINT:</b>	Not applicable
<b>BOILING POINT:</b>	124° – 215°C

EFD, Inc. 40 Catamore Boulevard, East Providence, RI 02914, USA [www.efd-inc.com](http://www.efd-inc.com)

**North and South America:** +1-800-556-3484 +1-401-431-7000  
 Fax: +1-401-431-7079  
[solder@efd-inc.com](mailto:solder@efd-inc.com)

**Europe** +44 (0) 1582 666334  
 Fax: +44 (0) 1582 664227  
[europe@efd-inc.com](mailto:europe@efd-inc.com)

**Asia** +86 (21) 3866 9006  
 Fax: +86 (21) 3866 9095  
[china@efd-inc.com](mailto:china@efd-inc.com)

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## Resin Paste Flux

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SOLUBILITY IN WATER: Insoluble  
RELATIVE DENSITY: >4 (H<sub>2</sub>O = 1)  
EVAPORATION RATE: Not applicable

### 10. Stability and Reactivity

STABILITY: Stable

MATERIALS TO AVOID: Strong oxidizers

CONDITIONS TO AVOID: High temperatures, high humidity.

HAZARDOUS DECOMPOSITION PRODUCTS: None identified.

HAZARDOUS POLYMERIZATION: Will not occur.

### 11. Toxicological Information

ACUTE TOXICITY: Not considered toxic under normal use.

LOCAL EFFECTS: None known.

EXCESSIVE EXPOSURE:

SKIN: Rosin may be a sensitizer. May cause skin irritation or dermatitis.

EYES: May be irritating to the eyes.

INHALATION: Prolonged inhalation of soldering vapors may produce asthma-like reactions.

### 12. Ecological Information

Possible ecological hazard. In high concentrations, this product may be dangerous to plants and animals. Keep out of waterways. Flux is biodegradable.

### 13. Disposal Considerations

Dispose of according to applicable government regulations. Recycle when possible. Do not dump into sewers, on the ground, or into any body of water.

### 14. Transportation Information

UN Number: Not regulated  
ADR/RID: Not regulated  
IMO/IMDG: Not regulated  
CAO/IATA: Not regulated

### 15. Regulatory Information

TSCA STATUS: All chemical constituents used in the manufacture of this product are listed on the TSCA inventory maintained by the U.S. Environmental Protection Agency.

REGULATED CHEMICALS:

Chemical Name	CAS#	Regulation
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None regulated

SARA Title III: None regulated

California State Proposition 65: No data.

EUROPEAN REGULATIONS:

HAZARD SYMBOL AND HAZARD INFORMATION

Xi – Irritant



R-Phrases

R36/38 Irritation of eyes and skin

R42/43 May cause sensitization by inhalation and skin contact

S-Phrases

S2 Keep out of reach of children

S24/25 Avoid contact with skin and eyes

S36/37 Wear safety gloves and glasses

### 16. Other Information

NFPA Rating:	Health	1	Flammability	1
	Reactivity	0	Special	n/a
HMIS Rating:	Health	1	Flammability	1
	Reactivity	0	Personal Protection	n/a

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Additionally, EFD Inc. assumes no responsibility for injury to the end user proximately caused by the material even if reasonable safety procedures are followed. The end user assumes the risk in his use of this material.

EFD, Inc. 40 Catamore Boulevard, East Providence, RI 02914, USA [www.efd-inc.com](http://www.efd-inc.com)

North and South America: +1-800-556-3484 +1-401-431-7000  
Fax: +1-401-431-7079  
[solder@efd-inc.com](mailto:solder@efd-inc.com)

Europe +44 (0) 1582 666334  
Fax: +44 (0) 1582 664227  
[europe@efd-inc.com](mailto:europe@efd-inc.com)

Asia +86 (21) 3866 9006  
Fax: +86 (21) 3866 9095  
[china@efd-inc.com](mailto:china@efd-inc.com)