

SAFETY DATA SHEET



Date Issued : 07/18/2019
 SDS No : 798LF (Delta 99C)

Delta® Water Soluble Lead Free Solder Paste Type 798LF - Delta 99C (Sn/Cu/Ni/Ge)

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Delta® Water Soluble Lead Free Solder Paste Type 798LF - Delta 99C (Sn/Cu/Ni/Ge)

PRODUCT DESCRIPTION: Lead Free Water Soluble Solder Paste

MANUFACTURER

Qualitek International, Inc.

315 Fairbank Street

Addison, IL 60101

Emergency Phone: (800)535-5053

Customer Service: (630)-628-8083

24 HR. EMERGENCY TELEPHONE NUMBERS

1-800-535-5053 Infotrac

1-352-323-3500 Outside the U.S.

2. HAZARDS IDENTIFICATION

GHS LABEL



Health
 hazard

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H351: Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

PRECAUTIONARY STATEMENT(S)

Prevention:

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P302+P352: IF ON SKIN: Wash with plenty of water/...

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage:

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P235: Keep cool.

Disposal:

P501: Dispose of contents/container in accordance to local/regional/national/international regulations.

POTENTIAL HEALTH EFFECTS

EYES: Fumes from this and other soldering products may cause eye irritation.

SKIN: Fumes from this and other soldering products may cause skin irritation.

INGESTION: Ingestion of this or other soldering products may cause headache, nausea, and muscular pain.

INHALATION: Inhalation of the fumes from this or other soldering products may cause headache, nausea and muscular pain.

CARCINOGENICITY: Not listed as a carcinogen by NTP, OSHA, or ACGIH.

MEDICAL CONDITIONS AGGRAVATED: Pre-existing conditions of the lungs, kidneys, nervous system and possibly reproductive systems; diseases of the blood forming organs

ROUTES OF ENTRY: Inhalation, ingestion, eye or skin contact.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Tin	87 - 88	7440-31-5
Copper	0.3 - 0.7	7440-50-8
Nickel	0.03 - 0.07	7440-02-0
Germanium	0.004 - 0.006	7440-56-4
Amines, tallow alkyl, ethoxylated	< 3	61791-26-2
Terpene Alcohol	< 2	98-55-5
Diethanolamine	< 0.5	111-42-2

4. FIRST AID MEASURES

EYES: MOLTEN PRODUCT: Cool burns with plenty of low-pressure water. Get immediate medical attention.

SOLID PRODUCT: Remove any contact lenses. Immediately flush eyes with large quantities of water for at least 15 minutes. Get medical attention if irritation develops.

SKIN: MOLTEN PRODUCT: Immediately cool skin burns with water and cold packs for at least 15 minutes. Do not put ice directly on the skin. Do not attempt to remove solidified product from the skin, as damage may result. Get immediate medical attention. **SOLID PRODUCT:** Immediately wash skin with soap and copious amounts of

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water. Use lotion to prevent dryness. Get medical attention if irritation develops.

INGESTION: If person is conscious, immediately give 2 glasses of water. Do not induce vomiting. Get immediate medical attention.

INHALATION: If symptoms of overexposure are experienced, evacuate to fresh air. If symptoms persist, seek medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

SKIN: Discomfort or rash.

INHALATION: Irritation of the pulmonary system.

CHRONIC EFFECTS: Prolonged or repeated exposure due to ingestion may cause anemia, insomnia, weakness, constipation and abdominal pain. Prolonged or repeated exposure due to skin exposure and inhalation may cause skin rash and damage to the mucous membranes.

COMMENTS: If victims of chemical over-exposure are taken for medical attention, give a copy of the label or this SDS to the physician/health care professional.

5. FIRE FIGHTING MEASURES

EXPLOSION HAZARDS: None known.

FIRE FIGHTING EQUIPMENT: Self contained breathing apparatus with full face piece operated in positive pressure demand mode, appropriate turn-out gear and chemical resistant personal protective equipment is recommended.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Scoop up material and deposit in appropriate containers. Clean up residual spill area with isopropanol or detergent water.

RELEASE NOTES: Avoid repeated or prolonged breathing or skin contact. Wash hands immediately, and remove material from under the fingernails.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Do not store or use near sparks or open flames. Keep containers tightly closed and upright when not in use in order to prevent leakage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
Chemical Name	Type	EXPOSURE LIMITS		
			ppm	mg/m ³
Tin	OSHA PEL	TWA	NL ppm ^[1]	2.00 mg/m ³ ^[1]
		STEL	NL ppm	NL mg/m ³
	ACGIH TLV	TWA	NL ppm	2.00 mg/m ³
		STEL	NL ppm	NL mg/m ³
	Supplier OEL	TWA	NL ppm	NL mg/m ³
		STEL	NL ppm	NL mg/m ³
Copper	OSHA PEL	TWA	NL ppm ^[1]	0.20 mg/m ³ ^[1]
		STEL	NL ppm	NL mg/m ³
	ACGIH TLV	TWA	NL ppm	0.20 mg/m ³
		STEL	NL ppm	NL mg/m ³
	Supplier OEL	TWA	NL ppm	NL mg/m ³
		STEL	NL ppm	NL mg/m ³

Footnotes:
1. NL = Not Listed

ENGINEERING CONTROLS: General (mechanical) room ventilation is expected to be satisfactory where this product is stored and handled and in closed equipment. Special local ventilation is needed at points where vapors can be expected to escape into the workplace air.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses

SKIN: Chemical resistant protective gloves.

RESPIRATORY: Not normally needed in well ventilated areas. If the ventilation is insufficient to remove smoke from soldering processes, use NIOSH/MSHA approved cartridge type respirator.

PROTECTIVE CLOTHING: Protective clothing and safety shoes as necessary to minimize contact.

OTHER USE PRECAUTIONS: Eye wash station should be easily accessible.

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9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Mild

APPEARANCE: Paste

COLOR: Metallic gray

FLASH POINT AND METHOD: > 204°C (400°F)

FLAMMABLE LIMITS: Not Established

AUTOIGNITION TEMPERATURE: > 227°C (440°F)

VAPOR PRESSURE: Not Determined

VAPOR DENSITY: Not Determined

BOILING POINT: 300°C (572°F)

MELTING POINT: 227°C (440.6°F) (alloy)

SOLUBILITY IN WATER: Partially Soluble

DENSITY: 7.4 gm/cm³

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur under normal use and storage conditions.

STABILITY: Stable under ordinary use and storage conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: May emit toxic fumes of carbon monoxide and carbon dioxide.

INCOMPATIBLE MATERIALS: Strong acids and strong oxidizers should be avoided..

11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY

IARC: Diethanolamine, CAS# 111-42-2; Possible Human Carcinogen (Class 2B)

12. ECOLOGICAL INFORMATION

GENERAL COMMENTS: No information on ecological toxicity or biodegradability is available at this time.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of this material, contaminated absorbent material and other contaminated materials in an approved waste disposal facility, according to all applicable Federal, State, and Local regulations. Recovery and reuse, rather than disposal, should be the ultimate goal in handling efforts.

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14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated by DOT

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HEALTH HAZARDS: Chronic health hazard.

313 REPORTABLE INGREDIENTS: Copper CAS# 7440-50-8 (weight percentage can be determined from product label)

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt. %	CAS
Copper	0.3 - 0.7	7440-50-8

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Copper	7440-50-8
Amines, tallow alkyl, ethoxylated	61791-26-2

TSCA STATUS: All ingredients are listed or are exempt from listing (as polymers) on the Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

CALIFORNIA PROPOSITION 65: **⚠ WARNING:** This product can expose you to chemicals including [see table below], which is [are] known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

Chemical Name	Wt. %	Listed
Diethanolamine	< 0.5	• Cancer

16. OTHER INFORMATION

APPROVED BY: P. Han TITLE: Technical Director

PREPARED BY: J. Saleda-Layton Date Prepared: 07/18/2019

INFORMATION CONTACT: (630) 628-8083

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HMIS RATING

HEALTH	<input type="checkbox"/>	1
FLAMMABILITY		1
PHYSICAL HAZARD		0
PERSONAL PROTECTION		B

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