

Date Issued: 11/13/2013 SDS No: Wire-WS700 **Date Revised:** 06/09/2020

Revision No: 3

Delta® WS700 Water Soluble Solder Wire - Sn/Ag/Cu Alloys

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Delta® WS700 Water Soluble Solder Wire - Sn/Ag/Cu Alloys

PRODUCT DESCRIPTION: Water Soluble Solder Wire

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS Qualitek International, Inc.

315 Fairbank Street

Addison, IL 60101

Emergency Phone: (800)535-5053 **Customer Service:** (630)-628-8083 1-800-535-5053 Infotrac 1-352-323-3500 Outside the U.S.

2. HAZARDS IDENTIFICATION

GHS LABEL



SIGNAL WORD: WARNING

HAZARD STATEMENTS

H333: May be harmful if inhaled.

H335: May cause respiratory irritation.

PRECAUTIONARY STATEMENT(S)

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.

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

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

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.



Date Issued: 11/13/2013 SDS No: Wire-WS700 Date Revised: 06/09/2020

Revision No: 3

Delta® WS700 Water Soluble Solder Wire - Sn/Ag/Cu Alloys

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	91.3 - 96.2	7440-31-5
Silver	2.7 - 4.2	7440-22-4
Copper	0.3 - 0.9	7440-50-8
Organic Acids	2.6 - 3	4767-03-7

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 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.



Date Issued: 11/13/2013 **SDS No**: Wire-W S700 **Date Revised**: 06/09/2020

Revision No: 3

Delta® WS700 Water Soluble Solder Wire - Sn/Ag/Cu Alloys

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

EXTINGUISHING MEDIA: Alcohol-resistant foam, carbon dioxide (CO2), or dry chemical.

EXPLOSION HAZARDS: Closed containers may explode when exposed to fire conditions.

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: If the material is in its solid state, pick up and reuse. When molten, allow to solidify, and then reuse if it is not contaminated. If contaminated, refer to Section 13 for proper disposal procedures.

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



Date Issued: 11/13/2013 SDS No: Wire-W S700 Date Revised: 06/09/2020

Revision No: 3

Delta® WS700 Water Soluble Solder Wire - Sn/Ag/Cu Alloys

EXPOSURE GUIDELINES

O	SHA HAZARDOUS COMPO	NENTS (29	CFR1910.1200)		
		EXPOS	URE LIMITS		
Chemical Name	Туре		ppm	mg/m³	
Tin	OCH A DEL	TWA	NL ppm [1]	2.00 mg/m3 [1]	
	OSHA PEL	STEL	NL ppm	NL mg/m3	
	ACGIH TLV	TWA	NL ppm	2.00 mg/m3	
		STEL	NL ppm	NL mg/m3	
	Supplier OEL	TWA	NL ppm	NL mg/m3	
		STEL	NL ppm	NL mg/m3	
Silver	OSHA PEL	TWA	NL ppm [1]	0.10 mg/m3 [1]	
		STEL	NL ppm	NL mg/m3	
	ACGIH TLV	TWA	NL ppm	0.10 mg/m3	
		STEL	NL ppm	NL mg/m3	
	C P. OFI	TWA	NL ppm	NL mg/m3	
	Supplier OEL	STEL	NL ppm	NL mg/m3	
Copper	OCHA DEI	TWA	NL ppm [1]	0.20 mg/m3 [1]	
	OSHA PEL	STEL	NL ppm	NL mg/m3	
	ACGIH TLV	TWA	NL ppm	0.20 mg/m3	
		STEL	NL ppm	NL mg/m3	
	Sumakan OEI	TWA	NL ppm	NL mg/m3	
	Supplier OEL	STEL	NL ppm	NL mg/m3	

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.



Date Issued: 11/13/2013 **SDS No**: Wire-W S700 **Date Revised**: 06/09/2020

Revision No: 3

Delta® WS700 Water Soluble Solder Wire - Sn/Ag/Cu Alloys

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Face shield, safety glasses with side shield or chemical splash goggles. When working with molten material, face shield is recommended.

SKIN: Rubber, chemical resistant gloves. When material is heated, wear gloves to protect against thermal burns.

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.

WORK HYGIENIC PRACTICES: Good personal hygiene practices should be used. Wash after any contact, before eating, and at the end of the work period.

OTHER USE PRECAUTIONS: Eye wash station and quick drench safety shower in immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Odorless

APPEARANCE: Metal in wire form.

COLOR: Silver gray

FLASH POINT AND METHOD: Not Applicable

FLAMMABLE LIMITS: Not Established

AUTOIGNITION TEMPERATURE: Not Applicable

VAPOR PRESSURE: 1 mmHg at 866°C (1591°F)

VAPOR DENSITY: Not Determined

BOILING POINT: 1380°C (2516°F) @ 760 mmHg

MELTING POINT: 217°C (423°F) to 221°C (430°F) (Please refer to Technical Bulletin for specific alloy data)

SOLUBILITY IN WATER: Partially Soluble

SPECIFIC GRAVITY: Please refer to Technical Bulletin for specific alloy data.

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



Date Issued: 11/13/2013 **SDS No**: Wire-WS700 **Date Revised**: 06/09/2020

Revision No: 3

Delta® WS700 Water Soluble Solder Wire - Sn/Ag/Cu Alloys

GENERAL COMMENTS: No toxicological information available at this time.

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.

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: Silver CAS# 7440-22-4, Copper CAS# 7440-50-8 (weight percentages can be determined from product label)

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Copper	0.3 - 0.9	7440-50-8

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: As a solid in wire form, there in no reportable quantity (RQ) for this product. However, if it is cut into pieces smaller than 100 micrometers, the RQ for silver is 1000 lbs., and the RQ for copper is 5000 lbs. Please contact local authorities to determine if there are any local reporting requirements.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Copper	7440-50-8

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



Date Issued: 11/13/2013 **SDS No**: Wire-W S700 **Date Revised**: 06/09/2020

Revision No: 3

Delta® WS700 Water Soluble Solder Wire - Sn/Ag/Cu Alloys

16. OTHER INFORMATION

REASON FOR ISSUE: New format

APPROVED BY: P. Han **TITLE:** Technical Director

PREPARED BY: J. Saleda-Layton **Date Revised:** 06/09/2020

INFORMATION CONTACT: (630) 628-8083

REVISION SUMMARY: This SDS replaces the 08/18/2017 SDS. Revised: **Section 2:** SIGNAL WORD.

HMIS RATING



MANUFACTURER DISCLAIMER: The information contained herein is based upon data considered to be accurate and is offered solely for information, customer consideration and investigation. The manufacturer extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser's use. The content of this Safety Data Sheet relates only to this product as sold and does not relate to use with any other material or in any process. All chemical products should be used only by, or under, the direction of technically qualified personnel, who are aware of the hazards involved and of the necessity for reasonable care in handling. Hazard communication regulations, United States Occupational Health and Safety (OSHA) and Canadian Workplace Hazardous Materials Information System (WHMIS) require that employees must be trained in the use of Safety Data Sheets as a source of hazards information and response.