SAFETY DATA SHEET

Delta® NC611 No Clean Solder Wire - Delta 99C (Sn/Cu/Ni/Ge)

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Delta® NC611 No Clean Solder Wire - Delta 99C (Sn/Cu/Ni/Ge)
PRODUCT DESCRIPTION: No Clean Lead Free Solder Wire

MANUFACTURER:
Qualitek International, Inc.
315 Fairbank Street
Addison, IL 60101
Emergency Phone: (800)535-5053
Customer Service: (630)-628-8083

2. HAZARDS IDENTIFICATION

GHS LABEL

PRECAUTIONARY STATEMENT(S)

Prevention:
P264: Wash hands thoroughly after handling.

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.

Storage:
P402: Store in a dry place.

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin</td>
<td>96.2 - 98.4</td>
<td>7440-31-5</td>
</tr>
<tr>
<td>Copper</td>
<td>0.63 - 0.64</td>
<td>7440-50-8</td>
</tr>
<tr>
<td>Nickel</td>
<td>0.04 - 0.06</td>
<td>7440-02-0</td>
</tr>
<tr>
<td>Germanium</td>
<td>&lt; 0.01</td>
<td>7440-56-4</td>
</tr>
<tr>
<td>Hydrogenated Rosin</td>
<td>&lt; 3</td>
<td>65997-06-0</td>
</tr>
</tbody>
</table>

### 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.

### 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Alcohol foam, carbon dioxide, 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
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EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)

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<thead>
<tr>
<th>Chemical Name</th>
<th>Type</th>
<th>ppm</th>
<th>mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OSHA PEL</td>
<td>TWA</td>
<td>NL ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>NL ppm</td>
</tr>
<tr>
<td>Tin</td>
<td>ACGIH TLV</td>
<td>TWA</td>
<td>NL ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>NL ppm</td>
</tr>
<tr>
<td></td>
<td>Supplier OEL</td>
<td>TWA</td>
<td>NL ppm</td>
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<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>NL ppm</td>
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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: Rubber, chemical resistant 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.

WORK HYGIENIC PRACTICES: Wash hands thoroughly after handling and before eating, drinking or smoking.

OTHER USE PRECAUTIONS: Eye wash station should be easily accessible.
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### 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:** Not Determined  
**VAPOR DENSITY:** Not Determined  
**BOILING POINT:** 198°C (388°F)  
**MELTING POINT:** 227°C (440.6°F)  
**SOLUBILITY IN WATER:** Partially Soluble  
**DENSITY:** 7.4 g/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

**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
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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

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CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: As a solid in wire form, there is 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)

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

16. OTHER INFORMATION

APPROVED BY: P. Han TITLE: Technical Director
PREPARED BY: J. Saleda-Layton Date Prepared: 07/24/2019
INFORMATION CONTACT: (630) 628-8083
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