

1. Product Identification

Product Code	QSW NC 601 No Clean Colophony Free Solder wire	
Trade Name	Delta TM Solder Wire	
Manufacturer	Qualitek (Europe) Ltd	Unit 9 Apex Court, Bassendale Road, Bromborough, Wirral CH62 3RE. UK. Fax 44(0)151-346-1408 Tel 44(0)151-334-0888
Supplier / Importer		

2. Composition and information on Components

Components	Content	EC No	CAS	Hazard	Risk
Tin	60 - 63 % *		7440-31-5		
Lead	36 - 37% *		7439-92-1		R21/22
Silver	2% *		7440-22-4		
Other	<2%		Products not classified- see notes on soldering fumes		

* Typically 98% of the wire will be constituted by metal alloy. Percentage weights of metals will vary according to the alloy type - see product label for details.

3. Hazard Identification

Main Hazards	Irritant May cause sensitisation by skin contact Irritating to eyes, respiratory system and skin
Health Effects Inhalation - Ingestion	Inhalation of the fumes or ingestion may cause headache, nausea, muscular pain. And Irritation of the eyes and nose. There is the risk of accumulative affects through repeated ingestion of lead.
Chronic (Prolonged effects)	Anaemia, insomnia, weakness, constipation, nausea and abdominal pain due to ingestion. Skin rash, damage of mucous membrane due to skin exposure and inhalation.

4. First Aid Measures

First Aid - Eyes	Immediately flush the eyes with water for at least 15 minutes, holding the eye open. Obtain medical attention urgently.
First Aid - Skin	Wash thoroughly with soap and water and remove all contaminated clothing as washing proceeds. Apply suitable lotion to prevent dryness. Seek medical attention.
First Aid - Inhalation	Remove person to fresh air and keep subject warm and at rest. Seek medical attention.
First Aid - Ingestion	Wash out mouth with water. Do not induce vomiting. Keep subject warm and at rest. Seek medical attention.

5. Fire Fighting Measures

Extinguishing media	Use Carbon Dioxide, Dry chemical, Alcohol resistant foam. Beware of the possibility of re-ignition.
Special Hazards	Dangerous when exposed to heat of flame. Containers may explode in heat of fire.
Protective Equipment for Fire Fighting	Wear full protective clothing and use breathing apparatus.

6. Accidental Release Measures

Personal Precautions	Wear appropriate protective clothing especially gloves. Eliminate sources of ignition. Avoid breathing vapour and contact with skin.
Environmental Precautions	Dispose of via a recognised waste disposal contractor
Spillages	n/a

7. Handling and Storage

Handling	Use in well ventilated area. Avoid breathing in soldering fumes. Avoid contact with eyes, skin and clothing. . Always wear gloves or wash hands after handling solder wire. Cardboard boxes containing multiple packages may weigh up to 30Kgs
Storage	Storage area should be cool and dry.

8. Exposure Controls - Personal Protection

Occupational Exposure Limits	Long-term exposure limit	Short term exposure limit
Lead	(8 Hour TWA) 0.15mg/m ³	(15 minute)
Engineering Control Measures	Ensure work area is well ventilated and equipment properly exhausted. Work area should be arranged so as not expose the operator to unnecessary fumes.	
Respiratory Protection	Respiratory protection if there is a risk of exposure to long periods breathing fumes.	
Eye Protection	Suitable eye protection should be worn to prevent flux spatter entering eyes.	
Skin Protection	Suitable gloves or wash hands after use .	
Foot Protection	Not necessary unless handling cartons holding multiple quantities of containers	

9. Physical and Chemical Properties

Form	Light grey metal wire
Appearance	Metallic-grey
Odour	None
Boiling point	1380 Deg C (vehicle)
Melting point	183 Deg C (for Sn63/Pb37 alloy)
Flash Point	n/a
Auto Ignition Temperature	n/a
Flammability limits in air	Lower : n/a Upper : n/a
Explosion Limits	Lower : n/a Upper : n/a
Vapour pressure	n/a
Vapour Density	n/a
Evaporation Rate	n/a
Specific Gravity	varies according to composition
Solubility	Partially soluble in water (vehicle)

10. Stability and Reactivity

Stability	Stable under normal conditions
Conditions to avoid	none
Materials to avoid	Strong acids, strong oxidising agents
Hazardous Decomposition Products	May release toxic vapours / gases such as Carbon Monoxide, Carbon Dioxide

11. Toxicological Information

Basis of Assessment	Information given is based on product data
Acute Toxicity - Oral	LD50 > 3000 mg/kg (lead)
Acute Toxicity - Dermal	LD50 > 3000 mg/kg
Acute Toxicity - Inhalation	LD50 > 5mg/L
Eye Irritation	Slight irritant
Skin Irritation	Slight Irritant - risk of sensitisation
Respiratory Irritation	Irritant in animal studies .
Skin sensitisation	May cause skin sensitisation
(Sub) Chronic Toxicity	Repeated exposure causes liver damage
Human effects	Repeated exposure can lead to allergic contact dermatitis.

12. Ecological Information

Mobility	The product is most likely to separate in water
Degradability	Solvent vehicle may degrade but alloy will not
Bio-accumulation	Possibility of accumulation of metallic alloys.
Ecotoxicity	

13. Disposal

Product	Product and spent containers should be disposed of by registered waste disposal contractor.
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14. Transport Information

UN Number, Shipping name and Class	n/a
Proper Shipping Name	n/a
UN Class / Packing Group	not classified
Packing Symbol	n/a

Trem Card Number	none
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15. Regulatory Information

Labelling Information

Irritant 

Risk Phrases	R21/22	: Harmful if swallowed and by inhalation
	R36/37/38	: Irritating to eyes, respiratory system and skin
	R43	: May cause sensitisation by skin contact

Safety Phrases	S23	:Do not breathe soldering fumes.
	S24/25	:Avoid contact with skin and eyes.

EC Annex 1 Classification	None
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Regulations / References	Refer to the requirements of all relevant local regulations. For the United Kingdom, see Control of Substances Hazardous to Health Regulations (COSHH), the Health and Safety at Work Act (HSWA) and the Carriage of Dangerous Goods by Road and Rail Regulations 1994.
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16. Other Information

Application	See technical data sheet for application information
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