

## SAFETY DATA SHEET

### Silver Conductive Paint

According to Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, December 2011

#### SECTION 1: Identification: Product identifier and chemical identity

##### Product identifier

**Product name** Silver Conductive Paint

**Product No.** SCP, ESCP03B, ESCP26G, ESCP50G, ESCP01K, ZE

##### Relevant identified uses of the substance or mixture and uses advised against

**Application** Paint.

**Uses advised against** No specific uses advised against are identified.

##### Details of the supplier of the safety data sheet

##### Supplier

ELECTROLUBE. A division of HK WENTWORTH LTD  
H K WENTWORTH PTY LIMITED  
P.O. BOX 7336  
WARRINGAH MALL  
BROOKVALE, NSW 2100  
AUSTRALIA

SYNERGY ELECTRONICS LTD  
39 RICHARD PEARSE DRIVE  
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NEW ZEALAND TEL: +64 (0) 9 836 6588, FAX +64 (0) 9 836 9169  
sales@hkwentworth.com.au

##### Emergency telephone number

**Emergency telephone** +61 2 8014 4558 (Australia)  
+64 9 929 1483 (New Zealand)

#### SECTION 2: Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Flam. Liq. 2 - H225

**Health hazards** STOT SE 3 - H336

**Environmental hazards** Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

##### Label elements

##### Pictogram



## Silver Conductive Paint

<b>Signal word</b>	Danger
<b>Hazard statements</b>	H225 Highly flammable liquid and vapour. H336 May cause drowsiness or dizziness. H410 Very toxic to aquatic life with long lasting effects.
<b>Precautionary statements</b>	P210 Keep away from heat/ sparks/ open flames/ hot surfaces. - No smoking. P240 Ground/ bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing vapour/ spray. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 Call a POISON CENTER or doctor/ physician if you feel unwell. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction. P391 Collect spillage. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.
<b>Contains</b>	1-Ethoxypropan-2-ol, Acetone, Ethyl acetate

### Other hazards

This product does not contain any substances classified as PBT or vPvB.

### SECTION 3: Composition and information on ingredients

#### Mixtures

<b>Silver</b> CAS number: 7440-22-4 M factor (Acute) = 10                      M factor (Chronic) = 10	<b>30-60%</b>
<b>Classification</b> Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	
<b>1-Ethoxypropan-2-ol</b> CAS number: 52125-53-8	<b>10-30%</b>
<b>Classification</b> Flam. Liq. 3 - H226 STOT SE 3 - H336	

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<b>Ethanol</b> CAS number: 64-17-5	<b>10-30%</b>
<b>Classification</b> Flam. Liq. 2 - H225	
<b>Acetone</b> CAS number: 67-64-1	<b>5-10%</b>
<b>Classification</b> Flam. Liq. 2 - H225 Eye Irrit. 2A - H319 STOT SE 3 - H336	
<b>Ethyl acetate</b> CAS number: 141-78-6	<b>1-5%</b>
<b>Classification</b> Flam. Liq. 2 - H225 Eye Irrit. 2A - H319 STOT SE 3 - H336	

The full text for all hazard statements is displayed in Section 16.

### SECTION 4: First aid measures

#### Description of first aid measures

<b>General information</b>	Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
<b>Inhalation</b>	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
<b>Skin Contact</b>	Rinse with water.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue. If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

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### Most important symptoms and effects, both acute and delayed

<b>General information</b>	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	A single exposure may cause the following adverse effects: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect.
<b>Ingestion</b>	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
<b>Skin contact</b>	Prolonged contact may cause dryness of the skin.
<b>Eye contact</b>	May cause temporary eye irritation.

### Indication of any immediate medical attention and special treatment needed

<b>Notes for the doctor</b>	Treat symptomatically.
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### **SECTION 5: Firefighting measures**

#### Extinguishing media

<b>Suitable extinguishing media</b>	The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

#### Special hazards arising from the substance or mixture

<b>Specific hazards</b>	Containers can burst violently or explode when heated, due to excessive pressure build-up. Flammable liquid and vapour. Vapours may be ignited by a spark, a hot surface or an ember. Vapours may form explosive mixtures with air. Fire-water run-off in sewers may create fire or explosion hazard.
<b>Hazardous combustion products</b>	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

#### Advice for firefighters

<b>Protective actions during firefighting</b>	Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to Australia/New Zealand Standards AS/NZS 4967 (for clothing) AS/NZS 1801 (for helmets), AS/NZS 4821 (for protective boots), AS/NZS 1801 (for protective gloves) will provide a basic level of protection for chemical incidents.

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### **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

## Silver Conductive Paint

### Personal precautions

No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Evacuate area. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated. Avoid inhalation of vapours and spray/mists. Use suitable respiratory protection if ventilation is inadequate.

### Environmental precautions

#### Environmental precautions

Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

### Methods and material for containment and cleaning up

#### Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Do not allow material to enter confined spaces, due to the risk of explosion. Approach the spillage from upwind. Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labelled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. The contaminated absorbent may pose the same hazard as the spilled material. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### Reference to other sections

#### Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

## SECTION 7: Handling and storage, including how the chemical may be safely used

### Precautions for safe handling

#### Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. In use may form flammable/explosive vapour-air mixture. Vapours may accumulate on the floor and in low-lying areas. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

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### Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

### Conditions for safe storage, including any incompatibilities

#### Storage precautions

Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Eliminate all sources of ignition. Take precautionary measures against static discharges. Earth container and transfer equipment to eliminate sparks from static electricity. Keep away from oxidising materials, heat and flames. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

#### Storage class

Flammable liquid storage.

#### Specific end use(s)

#### Specific end use(s)

The identified uses for this product are detailed in Section 1.

## SECTION 8: Exposure controls and personal protection

### Control parameters

#### Occupational exposure limits

##### Silver

Long-term exposure limit (8-hour TWA): 0.1 mg/m<sup>3</sup>

##### Ethanol

Long-term exposure limit (8-hour TWA): 1000 ppm 1880 mg/m<sup>3</sup>

##### Acetone

Long-term exposure limit (8-hour TWA): 500 ppm 1185 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): 1000 ppm 2375 mg/m<sup>3</sup>

##### Ethyl acetate

Long-term exposure limit (8-hour TWA): 200 ppm 720 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): 400 ppm 1440 mg/m<sup>3</sup>

### Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilating equipment.

## Silver Conductive Paint

<b>Eye/face protection</b>	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with Australia/New Zealand Standard AS/NZS 1337. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.
<b>Hand protection</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with Australia/New Zealand Standard AS/NZS 2161. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
<b>Other skin and body protection</b>	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
<b>Hygiene measures</b>	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.
<b>Respiratory protection</b>	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and complies with Australia/New Zealand Standard AS/NZS 1716. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with Australia/New Zealand Standard AS/NZS 1716. Full face mask respirators with replaceable filter cartridges should comply with Australia/New Zealand Standard AS/NZS 1716. Half mask and quarter mask respirators with replaceable filter cartridges should comply with Australia/New Zealand Standard AS/NZS 1716.
<b>Environmental exposure controls</b>	Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### SECTION 9: Physical and chemical properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Silver.
<b>Odour</b>	Solvent.
<b>pH</b>	Not available.
<b>Melting point</b>	Not available.
<b>Initial boiling point and range</b>	Not available.
<b>Flash point</b>	12°C/53.6°F
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.

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<b>Flammability Limit - Lower(%)</b>	Not available.
<b>Vapour pressure</b>	> 1.1 - 1.75 hPa @ 50°C/122°F
<b>Vapour density</b>	Not available.
<b>Relative density</b>	1.44 @ 20°C/68°F
<b>Solubility Value (g/100g H<sub>2</sub>O 20°C)</b>	Not available.
<b>Partition coefficient</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition Temperature</b>	Not available.
<b>Viscosity</b>	70 mPa s @ 25°C/77°F
<b>Explosive properties</b>	Not considered to be explosive.
<b>Oxidising properties</b>	Does not meet the criteria for classification as oxidising.

### SECTION 10: Stability and reactivity

<b>Reactivity</b>	See the other subsections of this section for further details.
<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
<b>Possibility of hazardous reactions</b>	The following materials may react strongly with the product: Oxidising agents.
<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition. Containers can burst violently or explode when heated, due to excessive pressure build-up. Static electricity and formation of sparks must be prevented. Do not pressurise, cut, weld, drill, grind or otherwise expose containers to heat or sources of ignition.
<b>Materials to avoid</b>	Oxidising materials. Acids - oxidising.
<b>Hazardous decomposition products</b>	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

### SECTION 11: Toxicological information

#### Information on toxicological effects

##### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

##### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

##### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

##### Skin corrosion/irritation

**Animal data** Based on available data the classification criteria are not met.

##### Serious eye damage/irritation

**Serious eye damage/irritation** Based on available data the classification criteria are not met.



## Silver Conductive Paint

### Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

### Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

### **IARC carcinogenicity**

Contains a substance/a group of substances which may cause cancer. IARC Group 1  
Carcinogenic to humans.

### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure

**STOT - single exposure** STOT SE 3 - H336 May cause drowsiness or dizziness.

**Target organs** Central nervous system

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

### Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

### **General information**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

### **Inhalation**

A single exposure may cause the following adverse effects: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect.

### **Ingestion**

Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.

### **Skin Contact**

Prolonged contact may cause dryness of the skin.

### **Eye contact**

May cause temporary eye irritation.

### **Route of entry**

Ingestion Inhalation Skin and/or eye contact

### **Target Organs**

Central nervous system

### Ethanol

#### **Toxicological effects**

Not regarded as a health hazard under current legislation.

#### Acute toxicity - oral

##### **Notes (oral LD<sub>50</sub>)**

LD<sub>50</sub> 10470 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

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<b>Notes (inhalation LC<sub>50</sub>)</b>	LD <sub>50</sub> 124.7 mg/l, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
<b><u>Skin corrosion/irritation</u></b>	
<b>Animal data</b>	Dose: 0.2 mL, 24 hours, Rabbit Primary dermal irritation index: 0 REACH dossier information. Based on available data the classification criteria are not met.
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<b>Genotoxicity - in vivo</b>	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<b><u>Carcinogenicity</u></b>	
<b>IARC carcinogenicity</b>	IARC Group 1 Carcinogenic to humans.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	Two-generation study - NOAEL 15% , Oral, Mouse REACH dossier information. Based on available data the classification criteria are not met.
<b>Reproductive toxicity - development</b>	Maternal toxicity: - NOAEL: 16000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	LOAEL ~4000 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

### Acetone

<b><u>Acute toxicity - oral</u></b>	
<b>Acute toxicity oral (LD<sub>50</sub> mg/kg)</b>	5,800.0
<b>Species</b>	Rat
<b>ATE oral (mg/kg)</b>	5,800.0
<b><u>Acute toxicity - inhalation</u></b>	
<b>Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)</b>	76.0
<b>Species</b>	Rat
<b>ATE inhalation (vapours mg/l)</b>	76.0

## SECTION 12: Ecological Information

<b>Toxicity</b>	Aquatic Acute 1 - H400 Very toxic to aquatic life. Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.
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### Silver

## Silver Conductive Paint

### Acute aquatic toxicity

LE(C)<sub>50</sub> 0.01 < L(E)C<sub>50</sub> ≤ 0.1

M factor (Acute) 10

### Chronic aquatic toxicity

M factor (Chronic) 10

### Ethanol

**Toxicity** Based on available data the classification criteria are not met.

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 14200 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates** LC<sub>50</sub>, 48 hours: 5012 mg/l, Ceriodaphnia dubia

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours: 11.5 mg/l, Chlorella vulgaris

**Chronic toxicity - aquatic invertebrates** NOEC, 9 days: 9.6 mg/l, Daphnia magna

### Ethyl acetate

**Acute toxicity - fish** LC<sub>50</sub>, 48 hours: 270 mg/l, Algae

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 164 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 96 hours: 2000 mg/l, Fish

### Persistence and degradability

**Persistence and degradability** The degradability of the product is not known.

### Ethanol

**Persistence and degradability** The substance is readily biodegradable.

**Biodegradation** Water - Degradation 74%: 10 days

**Chemical oxygen demand** 1.99 g O<sub>2</sub>/g substance

### Ethyl acetate

**Persistence and degradability** The product is readily biodegradable.

### Bioaccumulative potential

**Bioaccumulative Potential** No data available on bioaccumulation.

**Partition coefficient** Not available.

### Ethanol

## Silver Conductive Paint

**Bioaccumulative Potential** Bioaccumulation is unlikely.

**Partition coefficient** log Pow: -0.35

### Ethyl acetate

**Bioaccumulative Potential** The product is not bioaccumulating.

### Mobility in soil

**Mobility** No data available.

### Ethanol

**Mobility** The product is soluble in water.

**Surface tension** 24.5 mN/m @ 20°C/68°F

### Other adverse effects

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

### Waste treatment methods

**General information** The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

**Disposal methods** Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible. Vapour from residual product may create a highly flammable or explosive atmosphere inside the container. Containers should be thoroughly emptied before disposal because of the risk of an explosion. Do not cut or weld used containers unless they have been thoroughly cleaned internally.

## SECTION 14: Transport information

**General** For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

### UN number

**UN No. (ADG)** 1263

**UN No. (IMDG)** 1263

**UN No. (ICAO)** 1263

### UN proper shipping name

**Proper shipping name (ADG)** PAINT

**Proper shipping name (IMDG)** PAINT (CONTAINS Silver)

## Silver Conductive Paint

Proper shipping name (ICAO) PAINT

### Transport hazard class(es)

ADG class	3
ADG classification code	F1
ADG label	3
IMDG class	3
ICAO class/division	3

### Transport labels



### Packing group

ADG packing group	II
IMDG packing group	II
ICAO packing group	II

### Environmental hazards

Environmentally hazardous substance/marine pollutant



### Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-E, S-E

Hazchem Code •3YE

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

## SECTION 15: Regulatory information

### Inventories

#### Australia - AICS

None of the ingredients are listed or exempt.

## SECTION 16: Any other relevant information

### Classification abbreviations and acronyms

Flam. Liq. = Flammable liquid  
 STOT SE = Specific target organ toxicity-single exposure  
 Aquatic Acute = Hazardous to the aquatic environment (acute)  
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

### Training advice

Read and follow manufacturer's recommendations. Only trained personnel should use this material.

## Silver Conductive Paint

<b>Issued by</b>	Bethan Massey
<b>Revision date</b>	7/02/2017
<b>Revision</b>	0
<b>SDS No.</b>	952
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.