

## MATERIAL SAFETY DATA SHEET SILVER CONDUCTIVE PAINT

### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**PRODUCT NAME** SILVER CONDUCTIVE PAINT  
**PRODUCT NO.** SCP03B [ESCP03B]  
**APPLICATION** Highly conductive silver loaded paint for track repair and pinpoint shielding  
**SUPPLIER** H K WENTWORTH PTY LIMITED  
P.O. BOX 339  
BROOKVALE, NSW 2100  
AUSTRALIA  
TEL: 02 9938 1566  
FAX: 02 9938 1467  
GENERAL MANAGER  
**EMERGENCY TELEPHONE** Tel: 029938 1566 between 8.30am and 5.00pm EST  
**PROPER SHIPPING NAME** PAINT

### 2 HAZARDS IDENTIFICATION

**RISK PHRASES**

R11 Highly flammable.  
R67 Vapours may cause drowsiness and dizziness.

**SAFETY PHRASES**

S9 Keep container in a well-ventilated place.  
S16 Keep away from sources of ignition - No smoking.  
S51 Use only in well-ventilated areas.

**HAZARD ID 2**

The above phrases are the risks associated with the product

**STATEMENT OF HAZARDOUS NATURE**

HAZARDOUS SUBSTANCE (According to criteria of NOHSC). DANGEROUS GOODS (According to ADG Code).

**DG CLASS**

Class 3: Flammable liquids.

**PACKING GROUP** II

**UN NO.** 1263

**HAZCHEM CODE** •3YE

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification (NOHSC: 2011)
1-ETHOXYPROPAN-2-OL	216-374-5	1569-02-4	30-60%	R10 R67
SILVER	231-131-3	7440-22-4	30-60%	-
ETHANOL	200-578-6	64-17-5	10-30%	F;R11
ACETONE	200-662-2	67-64-1	5-10%	F;R11 Xi;R36 R66 R67
ETHYL ACETATE	205-500-4	141-78-6	1-5%	F;R11 Xi;R36 R66 R67
DIBUTYL PHTHALATE: DBP	201-557-4	84-74-2	<0.5%	Repr. Cat. 2;R61 Repr. Cat. 3;R62 N;R50

The Full Text for all R-Phrases are Displayed in Section 16

**COMPOSITION COMMENTS**

Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels Ingredients are registered on AICS

## SILVER CONDUCTIVE PAINT

### 4 FIRST-AID MEASURES

**NOTES TO THE PHYSICIAN**

Treat symptomatically

**INHALATION**

Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.

**INGESTION**

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. Rinse mouth thoroughly. Get medical attention.

**SKIN CONTACT**

Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention if irritation persists after washing.

**EYE CONTACT**

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

### 5 FIRE-FIGHTING MEASURES

**EXTINGUISHING MEDIA**

Use: Alcohol resistant foam. Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

**SPECIAL FIRE FIGHTING PROCEDURES**

Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours.

**UNUSUAL FIRE & EXPLOSION HAZARDS**

Solvent vapours may form explosive mixtures with air. May explode when heated or when exposed to flames or sparks.

**HAZCHEM CODE**                      •3YE

### 6 ACCIDENTAL RELEASE MEASURES

**SPILL CLEAN UP METHODS**

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers.

### 7 HANDLING AND STORAGE

**USAGE PRECAUTIONS**

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Provide good ventilation.

**STORAGE PRECAUTIONS**

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

**STORAGE CLASS**

Flammable liquid storage.

### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
ACETONE	ES-TWA	500 ppm	1185 mg/m3	1000 ppm	2375 mg/m3	
ETHANOL		1000 ppm	1880 mg/m3			
ETHYL ACETATE	ES-TWA	200 ppm	720 mg/m3	400 ppm	1440 mg/m3	
SILVER	ES-TWA		0.1 mg/m3			

**PROTECTIVE EQUIPMENT**

## SILVER CONDUCTIVE PAINT



### ENGINEERING MEASURES

All handling to take place in well-ventilated area.

### RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Use respiratory equipment with combination filter, type A2/P3.

### HAND PROTECTION

Use protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Nitrile gloves are recommended.

### EYE PROTECTION

Wear approved safety goggles.

### OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

### HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. When using do not eat, drink or smoke.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid		
COLOUR	Grey		
ODOUR	Characteristic		
SOLUBILITY	Soluble in water.		
BOILING POINT (°C)	56 - 132 (132.8 - 269.6 F)	RELATIVE DENSITY	1.7 @ 20 °c (68 F)
VOLATILE BY VOL. (%)	50	FLASH POINT (°C)	12 (53.6 F) CC (Closed cup).
AUTO IGNITION TEMPERATURE (°C)	255 (491 F)	FLAMMABILITY LIMIT - LOWER(%)	1.3
FLAMMABILITY LIMIT - UPPER(%)	19		

## 10 STABILITY AND REACTIVITY

### STABILITY

Stable under normal temperature conditions.

### CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition.

### MATERIALS TO AVOID

Strong acids. Strong oxidising substances.

## 11 TOXICOLOGICAL INFORMATION

### INHALATION

High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

### INGESTION

May cause stomach pain or vomiting.

### SKIN CONTACT

Prolonged or repeated exposure may cause severe irritation.

### EYE CONTACT

Irritating to eyes.

### OTHER HEALTH EFFECTS

This substance has no evidence of carcinogenic properties.

Name	ETHANOL
Toxic Dose 1 - LD 50	6200-17800 mg/kg (oral rat)
Toxic Dose 2 - LD 50	>20,000 mg/kg (oral-rbt)
Toxic Conc. - LC 50	8000 mg/l/4h (inh-rat)

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Name	ACETONE
Toxic Dose 1 - LD 50	5800 mg/kg (oral rat)
Toxic Dose 2 - LD 50	20,000 mg/kg (oral-rbt)
Toxic Conc. - LC 50	76 ppm/4h (inh-rat)
Name	ETHYL ACETATE
Toxic Dose 1 - LD 50	5620 mg/kg (oral rat)
Toxic Dose 2 - LD 50	18,000 mg/kg (oral-rbt)
Toxic Conc. - LC 50	1600 ppm/4h (inh-rat)
Name	DIBUTYL PHTHALATE: DBP
Toxic Dose 1 - LD 50	8000 mg/kg (oral rat)
Toxic Dose 2 - LD 50	3050 mg/kg (ipr-rat)
Toxic Conc. - LC 50	7.9 mg/m3/30h (inh-rat)
Name	SILVER
Toxic Dose 1 - LD 50	>2000 mg/kg (oral rat)
Toxic Dose 2 - LD 50	100 mg/kg (oral-mouse)

### 12 ECOLOGICAL INFORMATION

#### ECOTOXICITY

There are no data on the ecotoxicity of this product. The product is not expected to be hazardous to the environment.

#### DEGRADABILITY

No data available.

Name	ETHANOL
LC 50, 96 Hrs, FISH mg/l	8140
EC 50, 48 Hrs, DAPHNIA, mg/l	9268
IC 50, 72 Hrs, ALGAE, mg/l	>5000
Name	ACETONE
LC 50, 96 Hrs, FISH mg/l	5540
EC 50, 48 Hrs, DAPHNIA, mg/l	39

#### Degradability

The product is easily biodegradable.

Name	ETHYL ACETATE
LC 50, 96 Hrs, FISH mg/l	270
EC 50, 48 Hrs, DAPHNIA, mg/l	2306

### 13 DISPOSAL CONSIDERATIONS

#### GENERAL INFORMATION

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

#### DISPOSAL METHODS

Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point. Dispose of waste and residues in accordance with local authority requirements.

### 14 TRANSPORT INFORMATION



PROPER SHIPPING NAME	PAINT		
UDF Phrase 1	Class 3: Flammable liquid		
Class 3: Flammable liquid			
UN NO.	1263	ADG CLASS NO.	3
DG CLASS	Class 3: Flammable liquids.	PACKING GROUP	II

### SILVER CONDUCTIVE PAINT

TUNNEL RESTRICTION CODE	(D/E)	ADG LABEL NO.	3
HAZCHEM CODE	•3YE	UN NO. SEA	1263
IMDG CLASS	3	IMDG PAGE NO.	3
IMDG PACK GR.	II	EMS	F-E, S-E
MARINE POLLUTANT	No.	UN NO. AIR	1263
AIR CLASS	3	AIR PACK GR.	II

#### 15 REGULATORY INFORMATION

##### LABELLING



Highly  
Flammable

##### RISK PHRASES

R11 Highly flammable.  
R67 Vapours may cause drowsiness and dizziness.

##### SAFETY PHRASES

S9 Keep container in a well-ventilated place.  
S16 Keep away from sources of ignition - No smoking.  
S51 Use only in well-ventilated areas.

POISONS SCHEDULE NUMBER NONE

##### NATIONAL REGULATIONS AND REFERENCES

National Model Regulations for the Control of Workplace Hazardous Substances.  
National Code of Practice for the Control of Workplace Hazardous Substances.  
National Code of Practice for the Labelling of Workplace Substances.  
National Code of Practice for the Preparation of Material Safety Data Sheets.  
Approved Criteria for Classifying Hazardous Substances.  
Exposure Standards for Atmospheric Contaminants in the Occupational Environment.  
Australian Dangerous Goods Code. The Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

#### 16 OTHER INFORMATION

REVISION DATE NOVEMBER 2010

REV. NO./REPL. SDS 8

GENERATED

SDS NO. 10548

##### RISK PHRASES IN FULL

R10 Flammable.  
R11 Highly flammable.  
R36 Irritating to eyes.  
R61 May cause harm to the unborn child.  
R62 Possible risk of impaired fertility.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.  
R50 Very toxic to aquatic organisms.

##### DISCLAIMER

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.