



SAFETY DATA SHEET SILVER CONDUCTIVE PAINT

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

PRODUCT NAME SILVER CONDUCTIVE PAINT
PRODUCT NO. SCP
ESCP03B
ESCP26G
ESCP50G
ZE
APPLICATION Highly conductive silver loaded paint for track repair and pinpoint shielding
SUPPLIER ELECTROLUBE. A division of
HK WENTWORTH LTD
ASHBY PARK, COALFIELD
WAY,
ASHBY DE LA ZOUCH,
LEICESTERSHIRE LE65 1JF
UNITED KINGDOM
+44 (0)1530 419600
+44 (0)1530 416640
info@hkw.co.uk
EMERGENCY TELEPHONE +44 (0)1530 419600 between 8.30am - 5.00pm Mon – Fri

2 HAZARDS IDENTIFICATION

Highly flammable.
Vapours may cause drowsiness and dizziness.
CLASSIFICATION (1999/45) F;R11. R67.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content %	Classification (67/548/EEC)
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 is Displayed in Section 16

COMPOSITION COMMENTS

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

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.

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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.

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	WEL	500 ppm	1210 mg/m3	1500 ppm	3620 mg/m3	
ETHANOL	WEL	1000 ppm	1920 mg/m3			
ETHYL ACETATE	WEL	200 ppm		400 ppm		
SILVER	WEL		0,1 mg/m3			

WEL = Workplace Exposure Limit.

PROTECTIVE EQUIPMENT



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.

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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
VOLATILE ORGANIC COMPOUND (VOC)	850 g/litre

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)
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)

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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

GENERAL

For US Domestic transportation this product is classified as a Consumer Commodity. For International transportation this product is classified as UN1263 PAINT



PROPER SHIPPING NAME	PAINT
PROPER SHIPPING NAME	CONSUMER COMMODITY
ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT	No.
UN NO. ROAD	1263
ADR CLASS NO.	3
ADR CLASS	Class 3: Flammable liquids.
ADR PACK GROUP	II
HAZARD No. (ADR)	33
ADR LABEL NO.	3
HAZCHEM CODE	•3YE

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UN NO. SEA	1263
IMDG CLASS	3
IMDG PACK GR.	II
EMS	F-E, S-E
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.

UK REGULATORY REFERENCES

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.
Chemicals (Hazard Information & Packaging) Regulations.

ENVIRONMENTAL LISTING

Rivers (Prevention of Pollution) Act 1961. Control of Pollution (Special Waste Regulations) Act 1980. Control of Pollution Act 1974.

EU DIRECTIVES

System of specific information relating to Dangerous Preparations. 2001/58/EC.

Dangerous Substance Directive 67/548/EEC.

Dangerous Preparations Directive 1999/45/EC.

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

STATUTORY INSTRUMENTS

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

GUIDANCE NOTES

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

16 OTHER INFORMATION

REVISION COMMENTS

Revised in accordance with CHIP3 and EU Directives 1999/45/EC and 2001/58/EC

ISSUED BY

Helen O'Reilly

SILVER CONDUCTIVE PAINT

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.