


DZP Technologies Ltd
Future Business Centre
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SAFETY DATA SHEET

Silver conductive ink S0860

1	Identification of substance
Trade name	Silver conductive ink S0860
Description	Aqueous dispersion of silver particles in proprietary polymer binder
Identified uses	Research and development; industrial printing and coating.
Supplier	DZP Technologies Limited, Future Business Centre, Kings Hedges Rd, Cambridge CB4 2HY, UK
Contact for technical inquiries	Phone: +44(0)1223 781191, info@dzptechnologies.com

2	Hazard identification
Classification of the substance or mixture	<u>Classification according to Regulation EC No 1272/2008:</u> Aquatic Acute 1 H400 Very toxic to aquatic life. Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. <u>Classification according to EU Directives 67/548/EEC or 1999/45/EC:</u> N Dangerous for the environment R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Label elements	<u>Labelling according to Regulation EC No 1272/2008:</u>  GHS09 Signal word: Warning

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Hazard statements:

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of content/container in accordance with local/regional/national/international regulations.

3	Composition and information on ingredients
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Description Mixture of substances listed below with non-hazardous additions.

Hazardous ingredients according to Regulation (EC) No. 1272/2008 Silver, < 76 % (weight)
CAS number 7440-22-4, EINECS: 231-131-3
Aquatic Acute 1, H400; Aquatic Chronic 1, H410.

4	First aid measures
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Inhalation Supply fresh air. Consult doctor if irritation of respiratory passages occurs.

Skin contact Wash thoroughly with soap and water. Consult doctor if irritation continues. Remove contaminated clothing and wash before re-use.

Eye contact Rinse with running water for 20 minutes. Consult doctor if irritation continues.

Indigestion Rinse mouth thoroughly. Consult doctor if irritation continues.

Most important symptoms and effects, both acute and delayed No further relevant information available.

5	Fire fighting measures
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Flash point No data available.

Autoignition temperature No data available.

Flammable limits No data available.

Special firefighting procedures Wear full protective clothing. Wear self-contained breathing apparatus.

Extinguishing media Water spray, foam, dry powder or carbon dioxide

Unusual fire or explosion hazards Not a fire hazard.

Hazardous combustion products During fire, this compound forms toxic gases (CO, CO₂).

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6	Accidental release measures
Spill procedures	Mop up small spillages with washing up liquid.
Environmental protection	Avoid discharge in sewer or waterways. Inform respective authorities in case of seepage into water course or sewage system.
Person related safety precautions	Wear protective equipment.
7	Handling and storage
Safe handling	Avoid contact with eyes, skin and clothing. Wash hands thoroughly after handling. Do not inhale or ingest. Loosen closure cautiously before opening.
Storage requirements	<u>Do not freeze.</u> Keep containers sealed. Store in cool, dry and well-ventilated place. Protect from direct sunlight.
8	Exposure controls and personal protection
	The usual precautionary measures should be adhered to in handling chemicals. Wear protective glasses and protective work clothes. Keep away from food and drinks. Wash hands during breaks.
9	Physical and chemical properties
Form	Silver coloured liquid
Odour	Residual odour from silver metal manufacture may be present.
Danger of explosion	The product is not explosive.
Self-ignition	The product is not self-igniting.
Melting, boiling and flash points	Not determined.
Ignition temperature	Not determined.
Vapour pressure	Not determined.
Viscosity	Brookfield 2,000 - 5,000 mPa.s (cP) at 20 r.p.m. at 25 °C.
Solvent	Water
Solids content	81-85 % (weight)

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10	Stability and reactivity
Stability	Stable at normal temperatures and pressures.
Hazardous reactions	Not applicable.
Materials to be avoided	Not applicable.
Decomposition	Carbon oxides are formed during fire.
Conditions to avoid	Avoid excessive heat, flames and other ignition sources.
11	Toxicological information
	No data available.
12	Ecological information
Toxicity	Aquatic toxicity. Very toxic for fish.
General notes	Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Poisonous for fish and plankton in water bodies. Very toxic for aquatic organisms.
13	Disposal considerations
	This product must not be disposed together with household garbage. Do not allow product to reach sewage system. The product must be disposed of according to local and national regulations.
14	Transport information
General	This product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).
Transport/Additional information	Not dangerous.
15	Regulatory information
General	Observe the normal safety regulations when handling chemicals. For use only by technically qualified individuals.
Water hazard	Not applicable.
16	Other information
	The information herein is presented in good faith and believed to be accurate as of the date shown above. However, no warranty, express or implied, is given. It is the client's responsibility to ensure that its activities comply with the relevant laws.

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