

SAFETY DATA SHEET



CW7100 CircuitWorks® Conductive Grease (UK - Great Britain)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : CW7100 CircuitWorks® Conductive Grease (UK - Great Britain)
Product code : CW7100. CW7100BLK
Product description : Conductive agents
Product type : Liquid.
Other means of identification : Silver grease.Electric and electromechanical components - Conductive materials
 Industrial/Professional use
 UFI: FPD8-G0AR-F007-368J

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

Identified uses

Conductive agent

Uses advised against

Not applicable.

1.3 Details of the supplier of the safety data sheet

Manufacturer
 Chemtronics
 8125 Cobb Center Drive
 Kennesaw, GA 30152
 Tel. 770-424-4888 or toll free 800-645-5244

Distributor

Importer
 ITW Contamination Control BV
 Saffierlaan 5
 VZ-2132 Hoofddorp
 The Netherlands

Email: info@itw-cc.com

Tel: +31 88 1307 400
 FAX: +31 88 1307 499
 Website: www.Chemtronicseu.com

e-mail address of person responsible for this SDS : Importer/Only Representative
 Bay 150
 Shannon Industrial Estate
 Shannon
 County Clare
 Ireland
 V14 DF82
 +353 61 771 500
customerservice.shannon@itwpp.com

National contact

SECTION 1: Identification of the substance/mixture and of the company/undertaking

ITW Contamination Control BV
Saffierlaan 5
VZ-2132 Hoofddorp
The Netherlands

Email: info@itw-cc.com

Tel: +31 88 1307 400
FAX: +31 88 1307 499
Website: www.Chemtronicseu.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : EMERGENCY HEALTH INFORMATION:
United Kingdom (England or Wales) 0845 46 47 or Scotland 08454 24 24 24 (UK only)

Supplier

Telephone number : Chemtronics Product Information: 800-TECH-401 (800-832-4401)
Chemtronics Customer Service: 800-645-5244

Hours of operation : 8:00 AM to 5:00 PM

Information limitations : EMERGENCY HEALTH INFORMATION:
EMERGENCY SPILL INFORMATION:
Transport information

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Aquatic Acute 1, H400
Aquatic Chronic 1, H410

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

Ingredients of unknown toxicity : 100 percent of the mixture consists of component(s) of unknown acute oral toxicity
100 percent of the mixture consists of component(s) of unknown acute dermal toxicity
100 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

Ingredients of unknown ecotoxicity : Contains 30% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : Avoid release to the environment.

Response : Collect spillage.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

SECTION 2: Hazards identification

Supplemental label elements : FOR INDUSTRIAL USE ONLY
For professional use only.
Recycling/recovery In accordance with regional regulations

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
silver	EC: 231-131-3 CAS: 7440-22-4	≥50 - ≤75	Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=1000) See Section 16 for the full text of the H statements declared above.	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures**4.1 Description of first aid measures**

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

SECTION 4: First aid measures

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
 pain or irritation
 redness
 watering
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
 irritation
 redness
- Ingestion** : Adverse symptoms may include the following:
 Ingestion Seek medical attention.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 metal oxide/oxides

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

SECTION 6: Accidental release measures

6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
E1	100 tonne	200 tonne

7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
silver	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 0.1 mg/m ³ 8 hours.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
silver	DNEL	Long term Inhalation	0.04 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	0.1 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	1.2 mg/kg bw/day	General population	Systemic

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

SECTION 8: Exposure controls/personal protection

Environmental exposure controls : 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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties**Appearance**

Physical state	: Liquid.
Colour	: Grey. [Light]
Odour	: Not available.
Odour threshold	: Not available.
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: Not available.
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Not available.
Flash point	: [Product does not sustain combustion.]
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
pH	: Not available.
Viscosity	: Not available.
Solubility in water	: Not available.
Partition coefficient: n-octanol/ water	: Not applicable.
Vapour pressure	: Not available.
Relative density	: 2.5
Vapour density	: Not available.
Explosive properties	: Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts, oxidising materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.
Oxidising properties	: Not available.
Particle characteristics	
Median particle size	: Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: No specific data.
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Conclusion/Summary : Not available.

Acute toxicity estimates

N/A

Irritation/Corrosion

Conclusion/Summary : Not available.

Sensitisation

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : May cause eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause skin irritation.
- Ingestion** : Do not ingest. If swallowed then seek immediate medical assistance.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
redness
watering
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : Adverse symptoms may include the following:
Ingestion Seek medical attention.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

SECTION 11: Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information**12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
silver	Acute EC50 1.4 µg/l Marine water	Algae - Cryptomonad - Chroomonas sp.	4 days
	Acute EC50 0.24 µg/l Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Acute LC50 11 µg/l Fresh water	Crustaceans - Water flea - Ceriodaphnia reticulata	48 hours
	Acute LC50 2.13 µg/l Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
	Chronic NOEC 5 mg/l Marine water	Algae - Dinoflagellate - Glenodinium halli	72 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
silver	-	70	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

Additional information

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

14.6 Special precautions for user : **Transport within user's premises:** 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.

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

SECTION 15: Regulatory information

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
E1

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Listed

Industrial emissions (integrated pollution prevention and control) - Water : Listed

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.
Canada : All components are listed or exempted.
China : All components are listed or exempted.
Eurasian Economic Union : **Russian Federation inventory**: All components are listed or exempted.
Japan : **Japan inventory (CSCL)**: Not determined.
Japan inventory (ISHL): Not determined.
New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Republic of Korea : All components are listed or exempted.
Taiwan : All components are listed or exempted.

SECTION 15: Regulatory information

Thailand	: All components are listed or exempted.
Turkey	: Not determined.
United States	: All components are active or exempted.
Viet Nam	: All components are listed or exempted.
15.2 Chemical safety assessment	: This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- ATE = Acute Toxicity Estimate
- GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = GB CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- SGG = Segregation Group
- vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

Full text of abbreviated H statements

H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Full text of classifications

Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.