Safety Data Sheet

Issue date: 05/17/2019



Product name: Cu Electroforming Water Base Graphite Conductive Paint Product type/use: Conductive Paint Emergency telephone number: ChemTel Inc. +1 (813)248-0585

Company Address: Enchanted Leaves/Cu Electroforming PO Box 7302 Thousand Oaks, CA 91359

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

NOT CLASSIFIED

HAZARD CLASS HAZARD CATEGORY None None

PICTOGRAM(S)

None

Precautionary Statements

Prevention: Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves and eve protection.

Response: If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Graphite	7782-42-5	10 - 20
Carbon black	1333-86-4	1 - 10

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections

4. FIRST AID MEASURES

Inhalation: If symptoms are experienced, remove source of contamination or move victim to fresh air. Skin contact: Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention. Eye contact: Flush eye(s) immediately with plenty of water. If eye irritation persists, consult a specialist. Ingestion: If ingestion of a large amount does occur, seek medical attention.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures: Wear full protective clothing. Wear self-contained breathing apparatus.
Unusual fire or explosion hazards: This product is an aqueous mixture which will not burn.
Hazardous combustion products: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up.

Clean-up methods: Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation. Do not take internally. For industrial use only.

Storage: For safe storage, store between 32 °F (0°C) and 120 °F (48.9 °C) Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Protect from freezing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Graphite	2 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.	None	None
Carbon black	3 mg/m3 TWA Inhalable fraction.	3.5 mg/m3 PEL	None	None

Engineering controls: Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

Respiratory protection: If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Eye/face protection: Wear safety glasses; chemical goggles (if splashing is possible).

Skin protection: Wear impervious gloves for prolonged contact. Gloves should be tested to determine suitability for prolonged contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid Color: Black Odor: Characteristic Odor threshold: Not available. pH: 8 - 9 Vapor pressure: 17 mm hg (20 °C (68°F)) Boiling point/range: > 100 °C (> 212°F) Melting point/ range: Not determined Specific gravity: 1.11 - 1.12 Vapor density: 23.0 (Air = 1) Flash point: > 100 °C (> 212°F) Pensky Martens closed cup Flammable/Explosive limits - lower: Not available. Flammable/Explosive limits - upper: Not available. Autoignition temperature: Not applicable Flammability: Not applicable Evaporation rate: 1 (Butyl acetate = 1) Solubility in water: Not available. Partition coefficient (n-octanol/water): Not determined VOC content: 10 g/l Viscosity: 50 - 200 cp Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.
Hazardous reactions: Will not occur.
Hazardous decomposition products: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbon.
Reactivity: Not available.
Conditions to avoid: Elevated temperatures.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes Potential Health Effects/Symptoms Inhalation: This product is irritating to the respiratory system. Skin contact: This product is irritating to the skin. Eye contact: This product is irritating to the eyes. Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Graphite	No	No	No
Carbon black	No	Group 2B	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal. **Hazardous waste number:** Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated Hazard class or division: None Identification number: None Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated Hazard class or division: None Identification number: None Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated Hazard class or division: None Identification number: None Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health

CERCLA/SARA Section 313: None above reporting de minimis.

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List. **DSCL (EEC):** R10- Flammable. S25- Avoid contact with eyes. S36/37- Wear suitable protective clothing and gloves. S38- In case of insufficient ventilation, wear suitable respiratory equipment.

Protective Equipment: Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

16. ADDITIONAL INFORMATION

No representations or warranties, either expressed or implied, of merchant ability, fitness for a particular purpose or any other nature are made hereunder with respect to information or the product to which information refers.

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