Manufactured or Distributed by: UIC, Inc.
PO Box 863
Joliet, IL 60434
815-727-5431

MSDS
Material Safety Data Sheet

Emergency Numbers

In the US -
CHEMTREC: 1-800-424-9300

In Canada -
CANUTEC: 613-996-6666

Outside US and Canada -
Chemtrec: 703-527-3887

Carbon Anode Solution

1. Material Identification and Information

Synonyms: None
CAS No.: None
Product Code: UIC, Inc. Catalog Number CM300-002

2. Composition/Information on Ingredients

Hazardous Components 1% or greater; Carcinogens 0.1% or greater

COMPONENTS	CAS No.	Percent	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Dimethyl Sulfoxide	67-68-5	>75	ND	ND	ND
Potassium Iodide	7681-11-0	1-10	ND	ND	ND

3. Hazards Identification

Inhalation:
Irritant to respiratory tract causing sore throat, coughing, nausea, and headache. Exposure to higher concentrations may cause chemical pneumonia or death, or iodism from repeated exposure.

Skin Absorption:
Irritant to skin causing redness and pain. Symptoms may parallel inhalation. Rapidly absorbed through skin accelerating the absorption of other materials including toxins. Repeated exposure can result in allergic sensitization and dermatitis.

Eye Contact:
Vapors and contact cause severe irritation, burns, redness, pain, or blurred vision. May cause conjunctivitis with prolonged exposure.

Ingestion:
Large doses may cause bloody urine, kidney or liver damage. Iodide salts may cause hyperchidrosis, gastrointestinal upset, nausea, vomiting, or symptoms like serum sickness. Iodism includes a variety of symptoms, such as swelling or difficulty swallowing.

Signs and Symptoms of Exposure:
Irritation of respiratory system, skin or eyes, headache, nausea, dizziness, diarrhea. Iodism causes swelling, hydration, symptoms resembling serum sickness like fever and lymph node enlargement.

Medical Conditions Aggravated by Exposure:
Pre-existing skin conditions, impaired liver, kidney, or pulmonary function. Interactions with some medications, iodine crossing the placenta, or excreted in breast milk.

4. First Aid Measures

Inhalation:
Remove to fresh air immediately. If breathing has stopped, perform artificial respiration. If breathing is difficult, have qualified medical personnel administer oxygen, keep person warm and get medical attention.

Skin Absorption:
Remove contaminated clothing and wash before reuse. Flush skin with water for 15-20 minutes to remove all chemicals. Get immediate medical attention.

Eye Contact:
Flush eyes immediately with large amounts of water for 15-20 minutes, lifting upper and lower eyelids to remove all chemicals. Get immediate medical attention.

Ingestion:
Do not induce vomiting. Get immediate medical attention. Maintain airway and respiration. If vomiting occurs, keep head lower than hips to prevent aspiration.

5. Fire Fighting Measures

Flash Point: 190^{o} F (CC)
Auto Ignition Temperature: ND
Flammability Limits in Air % by Volume: ND

Extinguisher Media:
Water, foam, dry chemical, carbon dioxide.

Special Fire Fighting Procedures:
Wear full protective clothing and NIOSH-MSHA approved SCBA. Keep fire exposed containers cool with water spray.

Unusual Fire and Explosion Hazards:
Above the flash point, vapor-air mixture is explosive. Vapors heavier than air may flow along the ground to distant ignition sources and flashback.

6. Accidental Release Measures

Immediately contact environmental supervisor. Remove ignition sources and ventilate the area. Use protective clothing and equipment to prevent exposure when cleaning up.

7. Handling and Storage

Keep in a tightly closed containe. Store in a cool, dry, well-ventilated location far from heat or ignition sources. Isolate from oxidizing agents. Avoid all contact and wear appropriate protective gear.

8. Exposure Controls/Personal Protection

Respiratory Protection:
Specific respirator selection based on contamination levels in the workplace with the levels not exceeding the working limit of the respirator. Must be jointly approved by NIOSH-MSHA.

Protective Gloves:
Butyl Rubber or appropriate to prevent contact.

Eye Protection:
Splash-proof safety goggles or full-face shield.

Ventilation to be Used:
Local or general dilution to meet exposure limits.

Other Protective Clothing:
Impervious clothing and equipment to prevent repeated or prolonged exposure, including boots, lab coat, aprons or face shield.

Hygienic Work Practices:
If there is possibility of skin or eye contact, an eyewash fountain or quick drench shower must be provided in the immediate work area. Wash skin or hands immediately after exposure. Do not drink, eat, or smoke in the laboratory.

9. Physical and Chemical Properties

Boiling Point:	370^{o}F	Specific Gravity:	1.1
Vapor Pressure:	0.46 @ 68^{o}F	Melting Point:	ND
Vapor Density:	2.7	Evaporation Rate:	4.3 (CCl4 = 1)
Solubility in Water:	Miscible	Water Reactive:	ND

Appearance: Clear or light yellow liquid.
Odor: Mild ripe olive, vegetable odor.

10. Stability and Reactivity

Stability ___X___ Stable _____ Unstable — Conditions to Avoid: None

Incompatible Materials:
Strong oxidizing agents, acids, alkali metals, and carbon dioxide.

Hazardous Decomposition Products:
Emits toxic oxides of carbon, iodine, or iodide compounds when heated to decomposition. May produce formaldehyde and methyl mercaptan.

Hazardous Polymerization __X__ Will not Occur _____ May Occur — Conditions to Avoid: None

11. Toxicological Information

Carcinogen Listed in _____ NTP _____ OSHA _____ IARC __X__ Not Listed

Dimethylsulfoxide (67-68-5): Oral rat LD50 = 14,500 mg/kg. Irritation Data: Skin rabbit – 500 mg/24 hour mild; Eye rabbit – 500 mg/24 hour mild.

12. Ecological Information

Environmental Fate:
This product has not been studied as a mixture.

13. Disposal Considerations

Contain spill with absorbent, do not allow material to enter streams or waterways. Place in a clean, dry container for disposal in an approved waste facility according to Federal, State and Local regulations.

14. Transport Information

Domestic (Land, D.O.T.): Not Regulated

International (Water, I.M.O.): Not Regulated

International (Air, I.C.A.O.): Not Regulated

15. Regulatory Information

Chemical Inventory Status

Ingredient	TSCA	EC	Japan	Australia	Korea	Phil	Canada DSL	Canada NDSL
Dimethylsulfoxide (67-68-5)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Potassium Iodide (7681-11-0)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

Federal, State & International Regulations

	SARA 302 RQ	SARA 302 TPQ	SARA 313 List	SARA 313 Chem Cat.	CERCLA	RCRA 261.33	TSCA 8(d)
Dimethylsulfoxide (67-68-5)	No	No	No	No	No	No	No
Potassium Iodide (7681-11-0)	No	No	No	No	No	No	No

Chemical Weapons Convention: No

16. Other Information

NFPA Ratings: Health: **1** Flammability: **1** Reactivity: **0**
Label Hazard Warning: WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. COMBUSTIBLE LIQUID AND VAPOR.
Product Use: Laboratory Reagent