HMIS Index:	MATERIAL SAFETY DATA SHEET iCue™ B7002 Aqueous Dispersion	HMIS Rating:
0- Minimal 1- Slight 2- Moderate 3- Serious 4- Severe		1- Health 0- Flammability 0- Physical Hazard

Date Prepared: January 13, 2010 **Date Issued:** January 13, 2010 **Prepared By:** Michael Trembley/Product Stewardship Mgr.

Section 1. Chemical Product and Company Identification

Product Name: iCue™ B7002 Aqueous Dispersion

Recommended Use of the Chemical and Restrictions on Use: Used as polishing slurry in the semiconductor industry and other applications.

Information on the Manufacturer/Supplier:

Cabot Microelectronics Corporation(CMC)- United States
870 N. Commons Dr. Aurora, IL 60504, United States
Telephone No.: (MSDS Requests) 630.585.9471, (Technical Information) 630.375.5576, Facsimile No.: 630.585.9976
Emergency Telephone No.: Chemtrec (U.S.) 800.424.9300, Chemtrec (Intl) 703.527.3887, CMC (U.S.) 630.585.9471

Cabot Microelectronics Corporation- Japan
1287-19 Oaza-Kitakoyama, Geino-cho-Tsu-Mie, 514-2213 Japan
Telephone No.: 81.59.266.0120, Facsimile No.: 81.59.266.0121
Emergency Telephone No.: Chemtrec (Intl) 703.527.3887

Cabot Microelectronics Corporation- Singapore
Blk 205, #01-53/54, Woodlands Avenue 9, Singapore 738957
Telephone No.: 65.6511.0550, Facsimile No.: 65.6511.0540
Emergency Telephone No.: Chemtrec (Intl) 703.527.3887

Cabot Microelectronics Corporation- Taiwan
3F-1,No. 22,Chu Pei,Hsin Chu Hsien Taiwan 302,R.O.C
Telephone No.: 886.3.5526666, Facsimile No.: 886.3.5526677
Emergency Telephone No.: Chemtrec (Intl) 703.527.3887

Cabot Microelectronics Corporation- Korea
Sungok bldg. 5F, 4-1, Sunae-dong ,Bundang-gu ,Seongnam-si, Gyeonggi-do
Information Service or Emergency Telephone No.: 031.719.7491, (Facsimile No.) 031.719.7494

Section 2. Hazards Identification

Emergency Overview:

Milky, white slurry.

Caution: May cause skin and eye irritation. Do not breathe dust from dried product.

Potential Environmental Effects: None known.

Routes of Exposure: Eye, Skin.

Eye: May cause irritation to eye.

Skin: May cause irritation to skin.

Ingestion: May be harmful if swallowed.

Inhalation: Due to this material's liquid dispersion state, it is not expected to be a significant inhalation hazard. Dried product may cause irritation to the respiratory tract.

Chronic Effects: No components listed as carcinogens by IARC, NTP, Z List or OSHA.

Teratology: None known.

Reproduction Info.: None known.

Target Organs: None known.

Medical Conditions Aggravated: None known.

Section 3. Composition/Information on Ingredients

Component	CAS No.	EINECS #	% by Weight
Silica, Amorphous	7631-86-9	231-545-4	<14%
Proprietary Ingredients	Proprietary	Proprietary	<2%
De-Ionized Water	7732-18-5	231-791-2	>84%

Section 4. First-Aid Measures

If the substance contacts eyes:
-Immediately flush lightly with plenty of water for at least 15 minutes.
-If symptoms develop seek medical attention.
If the substance contacts skin:
-Flush affected area with water.
-Remove contaminated clothing.
-If symptoms develop seek medical attention.
If the substance is inhaled:
-Remove to fresh air.
-If breathing is difficult, give oxygen.
-If not breathing, give artificial respiration.
-If symptoms develop, seek medical attention.
If the substance is ingested:
-Do not induce vomiting.
-If conscious and alert, rinse mouth with water.
-If symptoms develop seek medical attention.
Most Important Symptoms/Effects (Acute and Delayed): Not available.
First aid and Note to Physicians: Treat symptomatically if present.

Section 5. Explosion and Fire-fighting Measures

Suitable Extinguishing Media:
-Use extinguishing media for surrounding fire.
-Unsuitable Media: Not Applicable
Specific Hazards Arising From the Chemical:
-Not Applicable
Specific Protective Equipment and Precautions for Fire Fighters:
-Standard personal protective equipment for structural fire fighting.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:
-Safety glasses or goggles, impervious gloves and protective clothing recommended when handling.
-If spilled material dries, creating airborne dust concentrations that exceed the applicable exposure limit, then an approved respirator for dust/fumes is recommended.
Environment Precautions:
-Do not allow material to surface waters.
Methods and Materials for Containment and Clean-Up:
-Absorb with inert material (e.g., dry sand or earth), then place in chemical waste container.
-Wear appropriate PPE. See Section 8.

Section 7. Handling and Storage

Precautions for Safe Handling:
-Avoid skin and eye contact.
-Avoid generating aerosols or mists.
-Do not breathe aerosols, mists or dust from dried product.
Conditions for Safe Storage, Including Incompatibilities:
-Keep from freezing.
Hygienic Practices:
-Avoid contact with skin.
-Wash exposed skin frequently.
-Good practices should be followed in regard to work clothing.

Section 8. Exposure Controls/Personal Protection

Exposure Limits, Biological Limit Values Etc.:
TLV (U.S.) = 10 mg/m^3 total dust for particles not otherwise classified
PEL (U.S.) = 10 mg/m^3 for nuisance dust. 15 mg/m^3 for total dust.
MAK (Germ.) = 4 mg/m^3 inhalable dust.
OES (U.K.) = 6 mg/m^3 total inhalable, 2.4 mg/m^3 respirable dust.
Australia (TLV) = 10 mg/m^3 total dust containing no asbestos and <1% crystalline silica.

Korea: 10 mg/m^3 (total dust)

Appropriate Engineering Controls:

-If operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below exposure limits.

Personal Protective Equipment:

Respiratory Protection:

- None normally needed unless mists or dust are generated.
- An approved air-purifying respirator (APR) for dusts/mists may be appropriate to control exposure. Protection provided by air-purifying respirators is limited. Us a positive-pressure, air supplied respirator if there is any potential for uncontrolled release, exposure levels are not known, or any circumstances where air-purifying respirators may not provide adequate protection. Use of respirators must include a complete respiratory protection program in accordance with national standards and current best practices.
- The following agencies/organizations approve respirators and/or criteria for respirator programs

U.S.: NIOSH approved under 42 CFR 84 required.
OSHA (29 CFR 1910.134)
ANSI Z88.2-1992
EU: CR592 Guidelines for the Selection and Use of Respiratory Protection.
Germany: DIN/EN 143 Respiratory Protective Devices for Dusty Materials.
UK: BS 4275 Recommendations for the Selection, Use and Maintenance of Respiratory Protective Equipment.
HSE Guidance Note HS(G)53 Respiratory Protective Equipment.

Eye protection: Safety glasses with side shields or goggles recommended to prevent eye contact.
Hand protection: Impervious gloves.
Body protection: Wear appropriate clothing to minimize skin contact.

Section 9. Physical and Chemical Properties

Appearance: Milky White Slurry.
Odor: None.
Odor Threshold: Not Applicable.
pH : 9.0-11.0
Melting Point/Freezing Point: 0°C / 32°F.
Initial Boiling Point and Boiling Range: 100°C / 212°F.
Flash Point: Not Applicable.
Evaporation Rate: Same as Water.
Flammability (Solid, Gas): Not Applicable.
Upper/Lower Flammability or Explosive Limits: Not Applicable.
Vapor Pressure: Same as Water.
Solubility (Water): Dispersible.
Vapor Density: Same as Water.
Specific Density (Gravity): Not Determined.
Partition Coefficient- N-Octanol/Water: Not Applicable.
Auto-Ignition Temperature: Not Applicable.
Decomposition Temperature: Not Available.
Viscosity: Not Determined.

Section 10. Stability and Reactivity

Chemical Stability: Stable.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: Freezing conditions.
Incompatible Materials: None.
Hazardous Decomposition Products: Nitrogen oxides, CO, CO_2 gases.

Section 11. Toxicological Information

Information on the Likely Routes of Exposure:

-Acute Inhalation Toxicity: Due to this material's liquid dispersion state, it is not expected to be a significant inhalation hazard. Dried product may cause irritation to the respiratory tract.
-Acute Oral Toxicity: May be harmful if swallowed.
-Skin: Skin irritation.
-Eye: Eye irritation.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: Not available

Delayed and Immediate Effects and Chronic Effects from Short and Long Term Exposure:

Immediate Effects

-Acute Toxicity: Not available.
-Skin Corrosion/Irritation: Skin irritation.
-Serious Eye Damage/Irritation: Eye irritation.
-Respiratory Sensitization: Not available.
-Skin Sensitization: Not available.
-Carcinogenicity: Not available. No components listed as carcinogens by IARC, NTP, Z List or OSHA.
-Germ Cell Mutagenicity: Not available.

-Reproductive Toxicity: Not available.
-STOST (Single Exposure): Not available.
-STOST (Repeated Exposure): Not available.
-Aquatic Toxicity: Not available.

Chronic Effects

-Chronic Ingestion Effect: None expected.
-Chronic Eye Effect: None expected.
-Chronic Skin Effect: None expected.
-Chronic Inhalation Effect: None known.

Numerical Measures of Toxicity: Not available.
Synergistic Materials: None expected.

Section 12. Ecological Information

Toxicity on Aquatic and Terrestrial Organisms: Not available.
Persistence and Degradability: The oxide component of this material will persist.
Bioaccumulation: This material is not expected to bio-accumulate.
Mobility in Soil: Oxide component not mobile in soil.
Other Adverse Effects: WGK Water Hazard Class - NWG

Section 13. Disposal Considerations

Disposal Methods:

-Dispose of in accordance with all applicable National, State and Local regulations. Same considerations should be given to the disposal of empty containers.

Precautions for Disposal: Not available
U.S.: As sold, not defined as hazardous waste under U.S. RCRA (Resource Conservation and Recovery Act) regulations.

Section 14. Transport Information

UN Number: Not applicable
UN Proper Shipping Name: Non-hazardous/Non-Regulated.
Transport Hazard Class: Not applicable.
Packing Group: Not applicable.
Marine Pollutant: Not applicable.
Information on Any Special Precautions: Not applicable.

Section 15. Regulatory Information

National Registries: All components are in compliance with the inventories below

-Australia: AICS Australian Inventory List
-Canada: CEPA, Canadian Environmental Protection Act, 6th Amendment, Domestic Substance List.
-China: Inventory of Existing Chemical Substances in China.
-Europe: EINECS, European Inventory of Existing Commercial Chemical Substances.
-United States: TSCA, Toxic Substance Control Act.
-Japan: METI, Ministry of Economy, Trade and Industry List of Existing and New Chemical Substances (ENCS).
-Korea: ECL, Existing Chemical List.

U.S. Regulations

-U.S. Clean Air Act, 1990: No components are listed as hazardous air pollutants. No components contain or are manufactured with Class I or Class II ozone depleting chemicals.
-U.S. Clean Water Act (40 CFR 116): No components are listed.
-U.S. SARA Title III:

- Section 302: Does not contain any constituents that are identified as extremely hazardous.
- Section 311/312: Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.
- Section 311/312 – MSDS Requirements – Not regulated.
- Section 313: Does not contain any of the substances identified under Section 313 as toxic chemicals in excess of the de minimis concentrations necessary to be subject to this rule.

-CERCLA: This material is not a hazardous substance under the CERCLA. Notification of spills of this material is not required.

European Regulations

-Product is not a dangerous substance regarding EU Directive 67/548/EEC and its various amendments and adaptations.

Classification: Skin Corrosion/Irritation Category 2; Eye Damage/Irritation Category 2B

Signal Word: Warning
Hazard Statement: -Causes skin irritation.

-Causes eye irritation.

Precautionary Statements: -Wear protective gloves/clothing and eye/face protection.
-Wash hands thoroughly after handling.
-If on skin: Wash with plenty of soap and water.
-Take off contaminated clothing and wash before re-use.
-If skin irritation occurs, seek medical advice/attention.
-Seek emergency treatment in reference to supplemental first aid instructions.
-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 advice/attention.

Section 16. Other Information

Sources of Reference Materials:

-MSDS has been prepared in accordance with the following:

- Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.
- American National Standards Institute (ANSI) Z400.1-2003.
- EC Directive 91/155/EEC and 93/113/EEC.

Abbreviations:

-CAS: Chemical Abstract Service.
-CERCLA: Comprehensive Environmental Response, Compensation and Liability Act.
-HMIS: Hazardous Materials Identification System.
-NIOSH: National Institute of Occupational Safety & Health.
-PEL: Permissible Exposure Limit.
-PPE: Personal Protective Equipment.
-SARA: Superfund Amendments and Reauthorization Act.
-TLV: Threshold Limit Value
-UN: United Nations.

Revision Indicator: Revised sections of the MSDS will be indicated by an asterisk (*) in front of the section affected.

-The information set forth is based on information which Cabot Microelectronics Corporation believes to be accurate.
-No warranty, express or implied, is intended. The information is provided solely for your information and consideration.
-Cabot Microelectronics Corporation assumes no legal responsibility for use or reliance thereon.

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