

PRODUCT NAME: **Blockmaster™ CE210****SAFETY DATA SHEET**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

| | | |
|----------------------------------|---------------------------------------|------------------------------|
| Product Identifier: | Blockmaster™ CE210 | |
| General Use: | Coating Material (R&D Use Only) | |
| Product Description: | Aqueous Solution of Oxyethylene Resin | |
| MANUFACTURER: | | EMERGENCY TELEPHONE NUMBERS: |
| JSR Life Sciences Corporation | | CHEMTREC: 1-800-424-9300 |
| 25 Miyukigaoka, Tsukuba, Ibaraki | | (in USA) 24Hrs Every day |
| 305-0841 Japan | | Telephone: +81-29-856-1726 |
| | | 9:00-17:45 Jpn M-F |
| | | Facsimile: +81-29-879-9120 |
| | | 24Hrs Every day |

DISTRIBUTOR

JSR Micro, Inc.
1280 North Mathilda Ave.,
Sunnyvale, CA94089
Telephone: 408-543-8800

2. HAZARDS IDENTIFICATION

GHS Classification of the mixtures and any national or regional information

| Hazards | Hazard elements | Classification | |
|---------------------|--|------------------------------|-----------------------------|
| Physical Hazards | Explosives | Not an explosive | |
| | Flammable gases | Not classified | |
| | Flammable aerosols | Not classified | |
| | Oxidizing gasses | Not classified | |
| | Gases under pressure | Not classified | |
| | Flammable liquids | Not classified | |
| | Flammable solids | Not classified | |
| | Self-reactive substances and mixtures | Not a self-reactive mixture | |
| | Pyrophoric liquids | Not classified | |
| | Pyrophoric solids | Not classified | |
| | Self-heating substances and mixtures | Not classified | |
| | Substances and mixtures which, in contact with water, emit flammable gases | Not classified | |
| | Oxidizing liquids | Not classified | |
| | Oxidizing solids | Not classified | |
| | Organic peroxides | Not a organic peroxide | |
| Corrosive to metals | Not classified | | |
| Health Hazards | Acute toxicity | Oral | Not classified |
| | | Dermal | Classification not possible |
| | | Inhalation (Gasses) | Classification not possible |
| | | Inhalation (Vapors) | Classification not possible |
| | | Inhalation (Dusts and Mists) | Classification not possible |
| | Skin corrosion/irritation | Not classified | |

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| Hazards | Hazard elements | Classification |
|--------------------------------------|---|--|
| | Serious eye damage/eye irritation | Not classified |
| | Respiratory or skin sensitization | Classification not possible / Classification not possible |
| | Germ cell mutagenicity | Not classified |
| | Carcinogenicity | Classification not possible |
| | Reproductive toxicity | Classification not possible |
| | Specific target organ systemic toxicity-Single exposure | Not classified |
| | Specific target organ systemic toxicity-Repeated exposure | Classification not possible |
| | Aspiration hazard | Classification not possible |
| Hazardous to the aquatic environment | Acute aquatic toxicity | Classification not possible |
| | Chronic aquatic toxicity | Classification not possible |

GHS label elements

Hazard symbols: none

| | | | | |
|--|--|--|--|--|
| | | | | |
| | | | | |

Signal word: **none**

Hazard statement:

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EMERGENCY OVERVIEW:

Colorless transparent to pale yellow aqueous liquid.

POTENTIAL HEALTH EFFECTS

INHALATION:

May cause irritation to nose and throat.

EYE CONTACT:

May cause irritation.

SKIN CONTACT:

May cause mild irritation.

INGESTION:

May be harmful if swallowed.

CARCINOGENICITY:

The particles in this liquid product are not considered a respirable hazard in the products natural state. The product must be properly handled. Do not allow the product to dry on a surface that can later be disturbed. Disturbance of the dried residue can generate potentially hazardous airborne particles. The solvents in this product are not listed to cause cancer.

SIGNS AND SYMPTOMS:

Eye and skin irritation.

NFPA RATINGS (SCALE 0 – 4): Health=1; Flammability=0; Reactivity=0

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National or regional information:

Japan Fire Defense Law, Not Dangerous goods.**3. COMPOSITION / INFORMATION ON INGREDIENTS**

| Component | % | CAS No. |
|-------------------|-------|-------------|
| Oxyethylene resin | 1-10 | Proprietary |
| Water | 90-99 | 7732-18-5 |

4. FIRST AID MEASURES**INHALATION:**

Remove exposed person to fresh air; perform artificial respiration if necessary.
Call a physician.

EYE CONTACT:

Immediately flush eyes with plenty of water at least 15 min. Call a physician.

SKIN CONTACT:

Immediately wash skin with soap and plenty of water.

INGESTION:

Contact a poison center and have MSDS information available.

NOTE TO PHYSICIAN:

Treatment may vary with condition of victim and specifics of incident.

5. FIRE-FIGHTING MEASURES**GENERAL HAZARD:**

May cause irritation.

EXTINGUISHING MEDIA:

Not applicable.

SPECIAL FIRE FIGHTING PROCEDURES:

Water should be used to keep fire exposed containers cool and to disperse vapors.
Firefighters should wear self-contained breathing apparatus.

FIRE AND EXPLOSION HAZARDS:

Not applicable.

Flashpoint and Method: Not applicable.

Flammable Limits: Not flammable.

Autoignition Temperature: Not applicable.

6. ACCIDENTAL RELEASE MEASURES**LARGE SPILL/SMALL SPILL:**

Dike or absorb with inert absorbent material before allowing to dry and transfer to D.O.T. container for disposal. Strictly, avoid draining into any Public water system. Dispose of absorbent and other waste in an appropriate chemical waste container. Wear proper personal protective equipment. Wash thoroughly after handling.

7. HANDLING AND STORAGE

Store in original container in a dry area. Avoid heat, sunlight, and ignition sources. Open only under well ventilated conditions. Loosen closure cautiously before opening. When using this substance: (a) avoid breathing the substance; (b) avoid ingestion; (c) use respiratory protection when in dust or mist form. Wear chemical goggles, resistant gloves and protective clothing to prevent contact. Wash thoroughly after handling.

PRECAUTIONS:

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Handle with care. When using this substance: (a) avoid touching the substance; (b) avoid ingestion. Wear chemical goggles, resistant gloves and protective clothing to prevent contact. Wash thoroughly after handling.

RECOMENDED STORAGE TEMPERATURE: 35.6 to 46.4°F (2 to 8°C)

STORAGE PRESSURE: Atmospheric

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**ENGINEERING CONTROLS:**

The use of local exhaust ventilation is recommended to control emissions near the source. Laboratory samples should be handled in a fumehood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

PERSONAL PROTECTION**RESPIRATORY PROTECTION:**

Under conditions of frequent use or heavy exposure, Respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

Any chemical cartridge respirator with organic vapor cartridge(s).

Any chemical cartridge respirator with a full facepiece and organic Vapor cartridge(s).

Any air-purifying respirator with a full facepiece and an organic Vapor canister.

For Unknown Concentrations or Immediately Dangerous to Life or Health.

Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.

Any self-contained breathing apparatus with a full facepiece.

SKIN PROTECTION:

Wear impermeable gloves and clothing during activities where there is potential for direct skin contact with chemical.

EXPOSURE GUIDELINE (S):

OSHA HAZARDS (29 CFR 1910.1200) Exposure Limits 8 hrs. TWA (ppm)

| COMPONENT | OSHA PEL | ACGIH TLV |
|-------------------|-----------------|-----------------|
| Oxyethylene resin | not established | not established |
| Water | not established | not established |

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity: 1.0-1.1
 Solubility in water: Soluble
 pH: 9-11
 Boiling Point: ca. 100°C (Water)

10. STABILITY AND REACTIVITY**INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID)**

Strong acid, strong basic substance and electrolyte solution.

HAZARDOUS DECOMPOSITION PRODUCTS:

This material is stable under recommended storage and handling conditions.

HAZARDOUS POLYMERIZATION:

May not occur.

11. TOXICOLOGICAL INFORMATION

PRODUCT NAME: **Blockmaster™ CE210**

Oxyethylene resin
No information available

Water:

ACUTE TOXICITY

| | | | |
|------|------|-----|--------------|
| Oral | LD50 | rat | 90,000 mg/kg |
|------|------|-----|--------------|

12. ECOLOGICAL INFORMATION

No information available

13. DISPOSAL CONSIDERATION

The user of this product must properly characterize the waste generated from the use of this product in accordance with all applicable federal, state and/or local laws and regulations in order to determine the proper disposal of the waste in accordance with all applicable federal, state and/or local laws and regulations.

14. TRANSPORT INFORMATION**TRANSPORTATION AND HAZARDOUS MATERIALS DESCRIPTION:**

Package and transport in accordance with Department of Transportation (DOT) and other regulatory agency requirements.

| | |
|------------------------------------|--|
| PROPER SHIPPING NAME: | Aqueous solution |
| IATA IDENTIFICATION NUMBER: | Not regulated as a hazardous material. |
| DOT IDENTIFICATION NUMBER: | Not regulated as a hazardous material. |

15. REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200: Ensure that the hazards associated with this product are transmitted to employees by means of a hazard communications program, in accordance with federal and state Occupational Safety and Health Administration (OSHA) regulations.

CERCLA/SUPERFUND HAZARD CATEGORY: Some of the ingredients of this product are listed in 40 CFR 302.4.

SARA 313 INFORMATION: At the time of this document's preparation, none of the ingredients of this product were listed in 40 CFR 372. The list should be periodically checked for applicable updates.

TOXIC SUBSTANCES CONTROL ACT (TSCA): All of the compounds in this product are on the TSCA Inventory and/or are subject to a Low Volume Exemption. In accordance with federal regulations, this material shall be used only as a research reagent. In particular, this material shall not be distributed to any person, other than for disposal. All users must utilize the worker protection measures and environmental release controls specified in this Material Safety Data Sheet and in EPA and OSHA regulations. Acknowledgment of receipt of this Material Safety Data Sheet shall be considered acknowledgment that the user will comply with these requirements.

CALIFORNIA PROPOSITION 65: At the time of this document's preparation, none of the ingredients of this product were included on the California Proposition 65 list of chemicals known to cause cancer or reproductive toxicity. The list should periodically be checked for applicable updates.

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16. OTHER INFORMATION

REVISION SUMMARY

| | |
|-------------------|----------------------------|
| December 25, 2009 | Original MSDS established. |
| June 14, 2012 | Revision 1 established. |
| July 25, 2014 | Revision 2 established. |
| October 6, 2014 | Revision 3 established. |

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