SAFETY DATA SHEET



1. Identification

Product identifier BMR™
Other means of identification None.

Recommended useNot available. **Recommended restrictions**None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name
Address
CETCO, an MTI Company
2870 Forbs Avenue
Hoffman Estates, IL 60192

United States

Telephone General Information 800 527-9948

Website http://www.cetco.com/

E-mail safetydata@mineralstech.com

Emergency phone number Emergency 1.866.519.4752/1 760 476 3962

Americas 1.866.519.4752 (US, Canada, Mexico) 1 760 476 3962

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 1

Serious eye damage/eye irritation Category 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes severe skin burns and eye damage. Causes serious eye damage.

Precautionary statement

Prevention Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face

protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. Wash contaminated clothing before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Sodium bisulfate		7681-38-1	70 - < 80
POLYETHYLENE GLYCOL		25322-68-3	3 - < 5
Other components below repor	table levels		20 - < 30

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Material name: BMR™ sps us

Composition comments

For the full text of the R phrases mentioned in this Section, see Section 15. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

4. First-aid measures

Inhalation

Move to fresh air. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or

persist.

Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash

contaminated clothing before reuse.

Eve contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately. Call a physician or poison control center immediately. If vomiting occurs, keep head low so that

Ingestion

stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Dry chemical, CO2, water spray or regular foam. Carbon dioxide (CO2). Use any media suitable for the surrounding fires.

Unsuitable extinguishing

media

None known.

Specific hazards arising from

the chemical

Special protective equipment

and precautions for firefighters Fire fighting

equipment/instructions

Specific methods

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH

(approved or equivalent) and full protective gear. In the event of fire, cool tanks with water spray.

During fire, gases hazardous to health may be formed.

Cool containers exposed to flames with water until well after the fire is out.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up Should not be released into the environment. Stop leak if you can do so without risk. Sweep up or gather material and place in appropriate container for disposal. Avoid dust formation. Following product recovery, flush area with water.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. Do not flush into surface water or sanitary sewer system.

7. Handling and storage

Precautions for safe handling

Keep away from heat and sources of ignition. Do not get this material in your eyes, on your skin, or on your clothing. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure. Do not get this material on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use local exhaust ventilation.

Conditions for safe storage, including any incompatibilities Store locked up. Keep away from heat. Keep in a well-ventilated place. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Keep out of the reach of children. Keep from freezing.

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Material name: BMR™

US. OSHA Table Z-3 (29 CFR 1910.1000)

Additional components	Туре	Value	Form
INERT OR NUISANCE DUSTS	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
US. Workplace Environmental Exp	oosure Level (WEEL) Guides		
Components	Туре	Value	Form
POLYETHYLENE GLYCOL (CAS 25322-68-3)	TWA	10 mg/m3	Particulate.

Biological limit values

Appropriate engineering

controls

No biological exposure limits noted for the ingredient(s).

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield. Avoid contact with eyes. Eye

wash fountain is recommended. Wear safety glasses; chemical goggles (if splashing is possible).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of butyl rubber or nitrile gloves is recommended

Remove and wash contaminated clothing before re-use.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene considerations

Avoid contact with eyes. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Granular. Solid. Physical state

Form Solid. Beaded material White. Off-white. Color

None. Odor

Odor threshold Not available. 1.5 (2% solution) 350 °F (176.67 °C) Melting point/freezing point Initial boiling point and boiling

range

Not available.

Flash point Not available. Not available. **Evaporation rate** Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

Not available.

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available.

0.00001 hPa estimated Vapor pressure

Vapor density Not available.

Material name: BMR™ SDS US

Not available. Relative density

Solubility(ies)

Not available. Solubility (water) Not available. **Partition coefficient**

(n-octanol/water)

Not available. **Auto-ignition temperature** 806 °F (430 °C) **Decomposition temperature** Not available. **Viscosity**

Other information

Bulk density 83 lb/ft3

Percent volatile 0 % estimated

CARB VOC

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Stable at normal conditions. **Chemical stability**

Possibility of hazardous

reactions

Will not occur.

Conditions to avoid Avoid temperatures exceeding the decomposition temperature. Reacts violently with strong

alkaline substances. This product may react with reducing agents. Do not mix with other chemicals. Contact with incompatible materials. This material forms a strongly acidic aqueous

solution, and this property may cause adverse environmental effects.

Strong oxidizing agents. This product may react with reducing agents. Incompatible with bases. Incompatible materials

This product may react with strong alkalies.

Hazardous decomposition

products

Sulphur oxides

11. Toxicological information

Information on likely routes of exposure

Prolonged inhalation may be harmful. May cause irritation to the respiratory system. Inhalation

Skin contact Causes severe skin burns. Causes serious eye damage. Eye contact Ingestion Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

blindness could result.

Information on toxicological effects

Corrosive effects. Contact with liquid can cause severe burns. **Acute toxicity**

Product	Species	Test Results
BMR™		
<u>Acute</u>		
Oral		
LD50	Rat	3308 mg/kg
Components	Species	Test Results

POLYETHYLENE GLYCOL (CAS 25322-68-3)

Acute Dermal

20000 mg/kg LD50 Rabbit

Oral

LD50 Rat 28000 mg/kg

Material name: BMR™ SDS US Components Species Test Results

Sodium bisulfate (CAS 7681-38-1)

Acute Oral

LD50 Rat 2490 mg/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye

Causes serious eye damage.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful. Repeated or prolonged exposure may cause irritation of

eyes and skin.

12. Ecological information

Ecotoxicity Components of this product have been identified as having potential environmental concerns.

Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon

exposure to aquatic organisms and aquatic systems.

Components Species Test Results

POLYETHYLENE GLYCOL (CAS 25322-68-3)

Aquatic

Fish LC50 Atlantic salmon (Salmo salar) > 1000 mg/l, 96 hours

Sodium bisulfate (CAS 7681-38-1)

Aquatic

Crustacea EC50 Daphnia 190 mg/L, 48 Hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material

and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Material name: BMR™ sps us

^{*} Estimates for product may be based on additional component data not shown.

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Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

Not regulated as dangerous goods.

IMDG

the IBC Code

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not available.

15. Regulatory information

US federal regulations OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly

Hazardous Process Safety Standard, 29 CFR 1910.119.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No (Exempt)

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Not regulated.

US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region Inventory name On inventory (yes/no)* Australia Australian Inventory of Chemical Substances (AICS) No

Material name: BMR™ SDS US

Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No

Philippines Philippine Inventory of Chemicals and Chemical Substances No

(PICCS)

Taiwan Taiwan Chemical Substance Inventory (TCSI)

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

16. Other information, including date of preparation or last revision

Inventory name

Issue date31-October-2014Revision date09-August-2018

Version # 15

Country(s) or region

HMIS® ratings Health: 3

Flammability: 0 Physical hazard: 0

NFPA ratings Health: 3

Flammability: 0 Instability: 0

Disclaimer The manufacturer expressly does not make any representations, warranties, or guarantees as to

its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use. The information provided in this Safety Data Sheet is correct to the best of our knowledge,

information and belief at the date of its publication.

Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier. The information in the sheet was written based on the best knowledge and experience currently

available.

Revision information Hazard(s) identification: Hazard statement

Hazard(s) identification: Response

Exposure controls/personal protection: Occupational exposure limits

Regulatory information: California Proposition 65

Material name: BMR™ SDS US

On inventory (yes/no)*

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).