

# SAFETY DATA SHEET

Revision date 2015-09-21

Revision number 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

**Product name** BISOMER<sup>®</sup> BZMA

### Other means of identification

**Product code** 5007932

**Synonyms** Benzyl methacrylate

### Recommended use of the chemical and restrictions on use

**Recommended use [RU]** Monomer for special polymers

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

**Supplier** GEO Specialty Chemicals UK Ltd  
Charleston Road, Hardley, Hythe  
Southampton, Hampshire SO45 3ZG  
United Kingdom  
Phone: +44 (0)23 80894666  
Fax No: +44 (0)23 80243113

**Contact Point** safety-data-sheet-fp@geosc.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC: (800) 424-9300  
Outside USA - +1 (703) 527-3887 collect calls accepted

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

|   |                     |
|---|---------------------|
| <b>Skin corrosion/irritation</b>                        | Category 2          |
| <b>Serious eye damage/eye irritation</b>                | Category 2          |
| <b>Skin sensitization</b>                               | Category 1          |
| <b>Specific target organ toxicity (single exposure)</b> | Category 3 - (H335) |

### GHS Label elements, including precautionary statements

### EMERGENCY OVERVIEW

|                                 |                           |                            |                               |
|---------------------------------|---------------------------|----------------------------|-------------------------------|
| <b>Physical state</b><br>liquid | <b>Color</b><br>colorless | <b>Appearance</b><br>clear | <b>Odor</b><br>characteristic |
|---------------------------------|---------------------------|----------------------------|-------------------------------|

**WARNING****Hazard statements**

Causes skin irritation  
 Causes serious eye irritation  
 May cause an allergic skin reaction  
 May cause respiratory irritation

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace  
 Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

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  
 IF ON SKIN: Wash with plenty of soap and water  
 Take off contaminated clothing and wash before reuse  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other information**

- Not applicable

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component           | CAS-No    | weight-% | TRADE SECRET |
|---------------------|-----------|----------|--------------|
| Benzyl methacrylate | 2495-37-6 | > 98     | *            |

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret

\*The exact percentage (concentration) of composition has been withheld as a trade secret

## 4. FIRST AID MEASURES

### First Aid Measures

**General advice**

In case of adverse health effects seek medical advice.

**Eye contact**

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

**Skin contact**

Rinse with running water and soap. Remove contaminated clothing and shoes.

**Ingestion**

Rinse mouth with water, then drink one or two glasses of water.

**Inhalation**

Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

### Most important symptoms and effects, both acute and delayed

**Acute effects**

None known.

**Chronic effects**

None known.

### Indication of any immediate medical attention and special treatment needed

**Note to physicians**

Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

**Suitable extinguishing media**

Water spray jet, Alcohol-resistant foam, Extinguishing powder, Carbon dioxide.

**Extinguishing media which must not be used for safety reasons**

High pressure waterjet.

### Special hazards arising from the substance or mixture

**Special Hazard**

Formation of toxic gases is possible during heating or in fires. The product may undergo spontaneous polymerization at high temperatures. Polymerization is exothermic and may cause damage to the container and/or release of thermal decomposition products.

### Advice for firefighters

**Firefighting measures**

Cool exposed containers with water spray after extinguishing fire.

**Special protective equipment for firefighters**

Full protective clothing and approved self-contained breathing apparatus required for firefighting personnel.

### Explosion data

**Sensitivity to Mechanical Impact**

None.

**Sensitivity to Static Discharge**  
None.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

#### **Personal precautions**

Wear suitable protective clothing and gloves.

### Environmental precautions

#### **Environmental precautions**

Do not empty into drains/surface water/ground water. Inform authorities in the event of product spillage to water courses or sewage systems.

### Methods and material for containment and cleaning up

#### **Methods for containment**

Prevent further leakage or spillage if safe to do so.

#### **Methods for cleaning up**

Remove with liquid-absorbing material (sand, peat, sawdust). Dispose of contaminated material as waste according to Section 13.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Advice on safe handling**

Avoid breathing vapor or mist

Use only in well-ventilated areas

Wash thoroughly after handling

Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing.

Avoid contact with eyes, skin and clothing

### Conditions for safe storage, including any incompatibilities

#### **Technical measures and storage conditions**

Store in a dry place

Store at temperatures not exceeding 25 °C/ 77 °F

Storage tank vents, especially those fitted with flame arrestors, should be inspected regularly for polymer fouling which can arise from vapor phase polymerization.

Do not store together with oxidants.

Tanks should preferably contain no dead spaces where the product can be trapped and polymerize. Internal structural members should therefore be kept to a minimum and tanks should be welded.

The product is stabilized against spontaneous polymerization before delivery. However, if the permissible storage time or storage temperature are greatly exceeded the product may polymerize.

Store away from direct heat or sunlight.

Do not store together with reductants.

Keep only in the original container in a cool, well-ventilated place

#### **Incompatible products**

Reaction with oxidants. Reaction with reducing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure Guidelines**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

### Appropriate engineering controls

#### **Engineering controls**

Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient.

### Individual protection measures, such as personal protective equipment

#### **Eye/face Protection**

If splashes are likely to occur: Chemical Goggles.

#### **Hand Protection**

Polychloroprene gloves. Coating thickness 1.1 mm. Level 5 > 240 min breakthrough time.

#### **Skin and body protection**

Wear suitable protective clothing.

#### **Respiratory protection**

Filter A2 is recommended in cases of prolonged exposure.

#### **Other personal protection data**

Eyewash fountains and safety showers must be easily accessible.

#### **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | liquid                   |
| <b>Color</b>          | colorless                |
| <b>Appearance</b>     | clear                    |
| <b>Odor</b>           | characteristic           |
| <b>Odor threshold</b> | No information available |

| <u>Property</u>                      | <u>Values</u>                   | <u>Remarks / Method</u>  |
|--------------------------------------|---------------------------------|--------------------------|
| <b>pH</b>                            | No information available        | No information available |
| <b>Melting / freezing point</b>      | No information available        | No information available |
| <b>Boiling point / boiling range</b> | > 230 °C / > 446 °F @ 1013 mbar | No information available |
| <b>Flash point</b>                   | > 100 °C / > 212 °F             | DIN 51758                |
| <b>Evaporation rate</b>              | No information available        | No information available |
| <b>Flammability (solid, gas)</b>     | No information available        | No information available |
| <b>Flammability Limit in Air</b>     |                                 |                          |

|   |                          |                          |
|---|--------------------------|--------------------------|
| <b>Upper flammability limit</b>               | No information available | No information available |
| <b>Lower flammability limit</b>               | No information available | No information available |
| <b>Vapor pressure</b>                         | No information available | No information available |
| <b>Vapor density</b>                          | No information available | No information available |
| <b>Specific gravity</b>                       | No information available | No information available |
| <b>Solubility (water)</b>                     | insoluble                | No information available |
| <b>Solubility in other solvents</b>           | No information available | No information available |
| <b>Partition coefficient: n-octanol/water</b> | No information available | No information available |
| <b>Autoignition temperature</b>               | No information available | No information available |
| <b>Decomposition temperature</b>              | No information available | No information available |
| <b>Kinematic viscosity</b>                    | No information available | No information available |
| <b>Dynamic viscosity</b>                      | 4 mPa s @ 20 °C          | No information available |

**Other information**

|  |   |
|--|---|
| <b>Density</b>                                   | 1.04 g/cm <sup>3</sup> @ 20 °C - ASTM D 1298-99         |
| <b>Bulk Density</b>                              | No information available                                |
| <b>Explosive properties</b>                      | Can polymerize violently.                               |
| <b>Oxidizing properties</b>                      | The substance or mixture is not classified as oxidizing |
| <b>Softening point</b>                           | No information available                                |
| <b>Molecular weight</b>                          | 176 g/mol   |
| <b>Volatile organic compounds (VOCs) content</b> | No information available                                |
| <b>Percent Volatile, wt. %</b>                   | No information available                                |

**10. STABILITY AND REACTIVITY****Reactivity****Reactivity**

Polymerizes readily unless inhibited. Polymerization is highly exothermic and, if not controlled, may be violent.

**Chemical stability****Chemical stability**

Stable under normal conditions of handling, use and transportation. Periodic air sparging in storage will assist long term stability.

**Possibility of hazardous reactions****Possibility of hazardous reactions**

None under normal processing.

**Hazardous polymerization**

May occur if inhibitor is depleted or if exposed to high temperature.

**Conditions to avoid**

**Conditions to avoid**

This product contains a peroxidation inhibitor. To maintain inhibitor activity, oxygen must not be eliminated from the atmosphere above the product.

Avoid radical forming substances (metal-ions, peroxides).

Avoid heating.

If prolonged excursions above the recommended storage temperature occur, then the rate of inhibitor depletion could accelerate, leading to an increased risk of polymerization. In these circumstances it is recommended that the inhibitor level be checked periodically using ASTM procedure D 3125, and more inhibitor added if depletion is observed.

**Incompatible materials****Materials to avoid**

Reaction with oxidants. Reaction with reducing agents.

**Hazardous decomposition products****Hazardous decomposition products**

Carbon oxides. Irritating vapors.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Eye contact**

Causes eye irritation.

**Skin contact**

Causes skin irritation. May cause sensitization by skin contact.

**Ingestion**

May be harmful if swallowed.

**Inhalation**

May cause respiratory irritation.

**Acute toxicity - Product Information**

**Oral LD50** > 2000 mg/kg body weight (EU classification)

**Dermal LD50** No information available

**Inhalation LC50** No information available

**Information on toxicological effects****Symptoms**

No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Skin corrosion/irritation**

Irritating (EU classification)

**Serious eye damage/eye irritation**

Irritating (EU classification)

**Sensitization**

May cause sensitization by skin contact

**Germ cell mutagenicity**

No information available

**Carcinogenicity**

This product does not contain any components in concentrations greater than or equal to 0.1% that are listed as known or suspected carcinogens by NTP, IARC, ACGIH, or OSHA.

**Reproductive toxicity**

No information available

**Specific target organ toxicity - Single exposure**

Irritating to respiratory system.

**Specific target organ toxicity - Repeated exposure**

No information available

**Aspiration hazard**

No information available.

**Other information**

Conclusions are drawn from sources other than direct testing.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity****Acute aquatic toxicity - Product Information**

|                             |                          |
|-----------------------------|--------------------------|
| <b>Fish</b>                 | No information available |
| <b>Crustacea</b>            | No information available |
| <b>Algae/aquatic plants</b> | No information available |

**Persistence and degradability****Persistence and degradability**

No information available

**Bioaccumulative potential****Bioaccumulative potential**

No information available.

**Mobility****Mobility**

No information available

**Results of PBT and vPvB assessment****PBT and vPvB assessment**

No information available

**Other adverse effects****Other information**

No other ecological studies have been carried out on this product.



### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

**Disposal of wastes**

Dispose of according to regulations.

**Contaminated packaging**

Disposal must be made according to official regulations. Packaging that cannot be cleaned are to be disposed of in the same manner as the product. .

### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**ICAO/IATA** Not regulated

**IMDG** Not regulated

### 15. REGULATORY INFORMATION

#### International Inventories

**TSCA (United States)**

All ingredients are on the inventory or exempt from listing

**Australia (AICS)**

All ingredients are on the inventory or exempt from listing

**Canada (DSL)**

All ingredients are on the inventory or exempt from listing

**Canada (NDSL)**

None of the ingredients are on the inventory.

**China (IECSC)**

All ingredients are on the inventory or exempt from listing

**EINECS (European Inventory of Existing Chemical Substances)**

All ingredients are on the inventory or exempt from listing

**ELINCS (European List of Notified Chemical Substances)**

None of the ingredients are on the inventory.

**ENCS (Japan)**

All ingredients are on the inventory or exempt from listing

**South Korea (KECL)**

All ingredients are on the inventory or exempt from listing

**Philippines (PICCS)**

All ingredients are on the inventory or exempt from listing

#### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**AICS** - Australian Inventory of Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**IECSC** - China Inventory of Existing Chemical Substances

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

### U.S. Federal Regulations

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic health hazard             | No  |
| Fire hazard                       | No  |
| Sudden release of pressure hazard | No  |
| Reactive hazard                   | No  |

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### U.S. State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

## 16. OTHER INFORMATION

|                    |            |                  |                     |                         |
|--------------------|------------|------------------|---------------------|-------------------------|
| <b>NFPA Rating</b> | Health - 2 | Flammability - 1 | Instability - 2     | Special Hazard -        |
| <b>HMIS Rating</b> | Health - 2 | Flammability - 1 | Physical hazard - 2 | Personal protection - B |

**Product code** 5007932

**Revision date** 2015-09-21

**Revision number** 1

#### **Additional information**

BISOMER® is a registered trademark of GEO Specialty Chemicals UK Ltd.

#### **Disclaimer**

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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet