

SAFETY DATA SHEET

Revision date 2015-10-08

Revision number 1.01

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

Product identifier

Product name BISOMER[®] DEGDMA HI

Other means of identification

Product code 745790
Synonyms Diethylene glycol dimethacrylate

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
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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).

Serious eye damage/eye irritation	Category 2
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GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Physical state liquid	Color almost colorless	Appearance clear	Odor No information available
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**WARNING****Hazard statements**

Causes serious eye irritation

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear eye/face protection

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

Other information

- Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	weight-%	TRADE SECRET
2-Propenoic acid, 2-methyl-, oxydi-2,1-ethanediyl ester	2358-84-1	>= 94%	*

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. If skin irritation occurs: Get medical advice/attention.

Ingestion

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

Inhalation

Remove to fresh air.

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

None known.

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

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

7. HANDLING AND STORAGE

Precautions for safe handling**Advice on safe handling**

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

Use only in well-ventilated areas

Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

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

Do not store together with oxidants.

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.

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.

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

Do not store together with reductants.

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

Store away from direct heat or sunlight.

Store in a dry 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**

Physical state	liquid
Color	almost colorless
Appearance	clear
Odor	No information available
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks / Method</u>
pH	No information available	No information available
Melting / freezing point	No information available	No information available
Boiling point / boiling range	No information available	No information available
Flash point	148.0 °C / 298.4 °F	CC (closed cup)
Evaporation rate	No information available	No information available
Flammability (solid, gas)	No information available	No information available
Flammability Limit in Air		
Upper flammability limit	No information available	No information available
Lower flammability limit	No information available	No information available
Vapor pressure	No information available	No information available
Vapor density	No information available	No information available
Specific gravity	No information available	No information available
Solubility (water)	insoluble	No information available
Solubility in other solvents	No information available	No information available
Partition coefficient: n-octanol/water	No information available	No information available
Autoignition temperature	No information available	No information available
Decomposition temperature	No information available	No information available
Kinematic viscosity	5.00 mm ² /s @ 25 °C	ASTM D 445-97
Dynamic viscosity	No information available	No information available

Other information

Density	1.0610 g/cm ³ @ 20 °C - ASTM D 1298-99
Bulk Density	No information available
Explosive properties	Can polymerize violently.
Oxidizing properties	The substance or mixture is not classified as oxidizing

Softening point	No information available
Molecular weight	242 g/mol
Volatile organic compounds (VOCs) content	No information available
Percent Volatile, wt. %	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

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

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

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.

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

Avoid heating.

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

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 serious eye irritation.

Skin contact

None to only slight irritation expected.

Ingestion

May be harmful if swallowed.

Inhalation

Overexposure to mist or spray may cause irritation of respiratory tract.

Acute toxicity - Product Information

Oral LD50	> 2000 mg/kg (analogy)
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**

Slightly irritating, does not require labeling (analogy)

Serious eye damage/eye irritation

Irritating (analogy)

Sensitization

No information available

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

No information available.

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**

Fish	No information available
Crustacea	No information available
Algae/aquatic plants	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**

Waste incineration with the approval of the responsible local authority.

Contaminated packaging

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

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

NFPA Rating	Health - 2	Flammability - 1	Instability - 2	Special Hazard -
HMIS Rating	Health - 2	Flammability - 1	Physical hazard - 2	Personal protection - B

Product code 745790

Revision date 2015-10-08

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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