

SAFETY DATA SHEET

Revision date 2019-Dec-10

Revision number 1.03

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

1.1 Product identifier

Product name BISOMER[®] IDMA
Product code 745805
Synonyms Isodecyl methacrylate
REACH registration number 01-2119894925-17-0003

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use [RU] Monomer for special polymers
Uses advised against None known

1.3 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

Responsibility Statement For further information, please contact safety-data-sheet-fp@geosc.com

1.4 Emergency telephone number

Emergency telephone 24 Hour Emergency Phone Number
GEO Specialty Chemicals UK Ltd
+44 (0)23 80891806

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Chronic aquatic toxicity	Category 1
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2.2 Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]



Signal word WARNING

Hazard statements

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

P273 - Avoid release to the environment

2.3 Other Information

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Component	EU EINECS	weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	(REACH) Regulation (EC 1907/2006)
Isodecyl methacrylate 29964-84-9	249-978-2	>= 96 - <= 98%	Aquatic Chronic 1 (H410)	Registration Number 01-2119894925-17-0003

For the full text of the H-Statements mentioned in this Section, see Section 16.

3.2 Mixtures

Not applicable

4. FIRST AID MEASURES

4.1 Description of 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.

Ingestion

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

Inhalation

Remove to fresh air.

4.2 Most important symptoms and effects, both acute and delayed

Most important symptoms and effects

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Note to physicians
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 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.

5.2 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.

5.3 Advice for firefighters

Special protective equipment for firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Firefighting measures

Cool exposed containers with water spray after extinguishing fire.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear suitable protective clothing and gloves.

6.2 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.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up

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

6.4 Reference to other sections

See Section 12 for additional Ecological Information

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas

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

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

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.

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

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

Store in a dry place. Store away from direct heat or sunlight.

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.

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.

Do not store together with reductants.

7.3 Specific end use(s)**Specific use(s)**

Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters****Occupational exposure limit value**

Component	European Union	United Kingdom	Spain	Germany
Isodecyl methacrylate 29964-84-9	NAV	NAV	NAV	NAV

Biological limit values

Component	European Union	United Kingdom	Spain	Germany
Isodecyl methacrylate 29964-84-9	NAV	NAV	NAV	NAV

Legend

NAV - Not available

Derived No Effect Level (DNEL)

Name on List	End User	Exposure route	Health Effects	Exposure Time	Values	Remarks
Isodecyl methacrylate	workers	Skin contact	Chronic effects		5.0 mg/kg	
Isodecyl methacrylate	workers	Inhalation	Chronic effects			Not applicable
Isodecyl methacrylate	consumers	Skin contact	Chronic effects			Not applicable
Isodecyl methacrylate	consumers	Inhalation	Chronic effects			Not applicable
Isodecyl methacrylate	consumers	Ingestion	Chronic effects			Not applicable

Predicted No Effect Concentration (PNEC)

Name on List	Environmental Compartment	Exposure Time	Values	Remarks
Isodecyl methacrylate	Fresh water		0.24 µg/l	
Isodecyl methacrylate	Marine water		0.024 µg/l	
Isodecyl methacrylate			0.169 µg/l	PNEC Aqua (intermittent release)
Isodecyl methacrylate	Fresh water sediment		0.0418 mg/kg	
Isodecyl methacrylate	Marine sediment		0.00418 mg/kg	
Isodecyl methacrylate	Soil		0.00823 mg/kg	

8.2 Exposure controls**Personal Protective Equipment****Eye/face Protection**

Tight sealing safety 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.

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

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

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH	No information available	No information available
Melting / freezing point	No information available	No information available
Boiling point / boiling range	263 °C / 505.4 °F @ 1018 hPa	OECD Test No. 103
Flash point	100.0 °C / 212.0 °F @ 1013 hPa	EU Method A.9: 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	0.0156 hPa @ 25 °C	Calculation method
Vapor density	No information available	No information available
Specific gravity	No information available	No information available
Solubility (water)	199 µg/l @ 20 °C	OECD Test No. 105
Solubility in other solvents	No information available	No information available
Partition coefficient: n-octanol/water	7.08	OECD Test No. 117
Autoignition temperature	295 °C / 563 °F @ 1003 hPa	DIN 51794
Decomposition temperature	No information available	No information available
Kinematic viscosity	3.56 mm ² /s @ 20 °C	OECD Test No. 114

Dynamic viscosity	No information available	No information available
Density	0.882 g/cm ³ @ 20 °C	DIN 51757

9.2 Other information

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	226 g/mol
Volatile Organic Compound (VOC) content, wt.%	No information available
Percent Volatile, wt.%	No information available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Reactivity

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

10.2 Chemical stability

Chemical stability

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

10.3 Possibility of hazardous reactions

Hazardous polymerization

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

10.4 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.

10.5 Incompatible materials

Materials to avoid

Reaction with oxidants. Reaction with reducing agents.

10.6 Hazardous decomposition products

Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Irritating vapors.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute health hazard

Eye contact

May cause slight irritation.

Skin contact

None to only slight irritation expected.

Ingestion

Low toxicity by this route.

Inhalation

None known.

Acute toxicity

Oral LD50	> 5000 mg/kg (rat) OSHA Toxicity Screening test
Dermal LD50	> 3000 mg/kg (rabbit) OSHA Toxicity Screening test
Inhalation LC50	LC0 > 0.9 mg/l @ 35°C (rat) OSHA Toxicity Screening test

Skin corrosion/irritation

Slightly irritating, does not require labelling

Method: OECD Test No. 404: Acute Dermal Irritation/Corrosion

Serious eye damage/eye irritation

Slightly irritating, does not require labelling

Method: OECD Test No. 405: Acute Eye Irritation/Corrosion

Sensitization

Dermal sensitization: non-sensitizing

Method: OECD Test No. 429: Skin Sensitization: Local Lymph Node Assay

Germ cell mutagenicity

Not mutagenic

Method: OECD Test No. 471: Bacterial Reverse Mutation Test

Carcinogenicity

No information available

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

12. ECOLOGICAL INFORMATION

12.1 Toxicity**Acute aquatic toxicity**

Fish	LC50 (48 hour): 470 mg/l Method: DIN 38412
Crustacea	EC50 (21 day) > 118 µg/l Method: OECD Test No. 211: Daphnia magna Reproduction Test

Bacteria toxicity

LC0: 500 mg/l

Method: OECD Test No. 209: Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)

Algae/aquatic plants

EC50 (72 hour) > 16.9 µg/l

Method: OECD Test No. 201: Freshwater Alga and Cyanobacteria, Growth Inhibition Test

12.2 Persistence and degradability**Persistence and degradability**

No information available

Biodegradation

62% biodegradability after 28 days

Method: OECD 310

12.3 Bioaccumulative potential**Bioaccumulative potential**

No bioaccumulation potential

12.4 Mobility in soil**Mobility**

No information available.

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

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)

This substance is not considered to be very persistent nor very bioaccumulating (vPvB)

12.6 Other adverse effects**Other information**

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

13. DISPOSAL CONSIDERATIONS

13.1 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

US DOT**14.1. UN number** UN 3082**14.2. UN proper shipping name** Environmentally Hazardous Substance, Liquid, N.O.S. (Isodecyl methacrylate)**14.3. Transport hazard class(es)** 9**14.4. Packing group** III**14.5. Environmental hazards****14.6. Special precautions for user****ERG Number** 171

Land transport (ADR/RID)**14.1. UN number** UN 3082**14.2. UN proper shipping name** Environmentally Hazardous Substance, Liquid, N.O.S. (Isodecyl methacrylate)**14.3. Transport hazard class(es)****14.4. Packing group** III**14.5. Environmental hazards****14.6. Special precautions for user**

Classification code M6

Hazard identification number (Kemler No.) 90

Tunnel restriction code E

Air transport (ICAO-TI / IATA-DGR) Not regulated**14.1. UN number** UN 3082**14.2. UN proper shipping name** Environmentally Hazardous Substance, Liquid, N.O.S. (Isodecyl methacrylate)**14.3. Transport hazard class(es)****14.4. Packing group** III**14.5. Environmental hazards****14.6. Special precautions for user**

ERG Code 9L

Sea transport (IMDG) Not regulated**14.1. UN number****14.2. UN proper shipping name****14.3. Transport hazard class(es)** 9**14.4. Packing group****14.5. Environmental hazards****14.6. Special precautions for user**

EmS F-A; S-F

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**International Inventories****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

European Union (EINECS)

All ingredients are on the inventory or exempt from listing

European Union (ELINCS)

None of the ingredients are on the inventory.

Japan (ENCS)

Some ingredients are not on the inventory.

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

United States (TSCA)

Some ingredients are not on the inventory.

Legend

AICS - Australian Inventory of Chemical Substances

DSL/NDL - 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

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

15.2 Chemical Safety Report

A Chemical Safety Assessment has been carried out for this substance.

16. OTHER INFORMATION

Product code 745805

Revision date 2019-Dec-10

Full text of H-Statements referred to under sections 2 and 3

H410 - Very toxic to aquatic life with long lasting effects

Key or legend to abbreviations and acronyms used in the safety data sheet

NAV - Not available

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006.

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.