

Safety Data Sheet 9191

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Issue date: 06/09/2025 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product name : BIMAX® DDDMA

Product code : 9191
Product form : Substance
Physical state : Liquid
Formula : C20H34O4

Synonyms : 1,12-DODECANEDIYL BISMETHACRYLATE

2-PROPENOIC ACID, 2-METHYL-, 1,1'-(1,12-DODECANEDIYL) ESTER

Chemical name : 1,12-DODECANEDIMETHACRYLATE

1.2. Recommended use and restrictions on use

Recommended use : Laboratory chemicals

Manufacture of substances

1.3. Supplier

GELEST, INC. 158 Industrial Road Glen Rock, PA 17327 USA

T 717-227-1774 - F 717-227-1775 (M-F): 8:00 AM - 5:30 PM EST

CS-Gelest@m-chem.com - www.gelest.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation, Category 2 H315 Causes skin irritation.

Serious eye damage/eye irritation, Category 2 H319 Causes serious eye irritation.

Skin sensitization, Category 1 H317 May cause an allergic skin reaction.

Specific target organ toxicity – Single exposure, H335 May cause respiratory irritation.

Category 3, Respiratory tract irritation

Hazardous to the aquatic environment — Acute H400

Hazard, Category 1

Hazardous to the aquatic environment — Chronic H410 Very toxic to aquatic life with long lasting effects.

Hazard, Category 1

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)





Signal word (GHS US) : Warning

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Very toxic to aquatic life.

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Hazard statements (GHS US) : H315 - Causes skin irritation

H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H335 - May cause respiratory irritation H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS US) : P261 - Avoid breathing fume, mist, vapors, spray.

P264 - Wash hands thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, eye and face protection.

P302+P352 - If on skin: Wash with plenty of soap and water.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P312 - Call a poison center or doctor if you feel unwell.

P321 - Specific treatment (see supplemental first aid instruction on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.

P337+P313 - If eye irritation persists: Get medical advice or attention. P362+P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards not otherwise classified (HNOC)

Other hazards which do not result in classification : Hazardous polymerization may occur.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Mono-constituent
Name : BIMAX® DDDMA
CAS-No. : 72829-09-5

Name	Product identifier	%	GHS US classification
1,12-Dodecanediol dimethacrylate	CAS-No.: 72829-09-5		Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

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SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison

center/doctor/physician if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs:

Get medical advice/attention.

First-aid measures after eye contact : 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.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Avoid the use of streaming water, as this may spread the fire.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.

Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper

protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid breathing fume, mist, spray, vapors. Avoid contact with skin and

eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer

to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

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6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or

streams. Stop leak, if possible without risk.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing fume, mist, spray, vapors. Avoid

contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Keep container tightly closed in a dry and well-ventilated place away from heat

sources. Store in a cool dark environment.

Incompatible materials : Oxidizing agents. Bases. Free radical intiators.

Storage temperature : < 5 °C (Recommended)

Packaging materials : Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing. Where extensive dermal exposure may occur, either a chemical suit or chemical apron will be needed.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear, colorless to light yellow liquid.

Molecular mass : 338.49 g/mol

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Color
Color
Color
Color
Color
Colorless to light yellow.
Color Colorless to light yellow.
Color Colorless to light yellow.
Colorl

Melting point : 5.5 °C

Freezing point : No data available Boiling point : No data available Flash point : $\approx 175 \,^{\circ}\text{C}$ @ 1013 hPa

Auto-ignition temperature : 280 °C

Decomposition temperature : No data available
Flammability (solid, gas) : Not applicable.

Vapor pressure : 0.002 Pa @ 25 °C

Relative vapor density at 20°C : No data available

Relative density : No data available

Density : 0.954 g/cm³ @ 20 °C

Solubility : Insoluble in water.

Water: 11.1 µg/l

Partition coefficient n-octanol/water (Log Pow) : 6.5 @ 40 °C
Partition coefficient n-octanol/water (Log Kow) : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosion limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal temperatures and pressures. Polymerization can occur at elevated temperatures. Contains the following stabilizer(s): MEHQ.

10.3. Possibility of hazardous reactions

Hazardous polymerization may occur.

10.4. Conditions to avoid

Heat and light.

10.5. Incompatible materials

Oxidizing agents. Bases. Free radical intiators.

10.6. Hazardous decomposition products

No data available. In the event of fire: see section 5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Skin and eye contact; Inhalation

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified

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Acute toxicity (inhalation) : Not classified

1,12-Dodecanediol dimethacrylate (72829-09-5)

LD50 oral rat > 2000 mg/kg

Skin corrosion/irritation Causes skin irritation. Serious eye damage/irritation Causes serious eye irritation. Respiratory or skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity Not classified Not classified Carcinogenicity : Not classified Reproductive toxicity

STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure Not classified Aspiration hazard Not classified

Potential Adverse human health effects and

symptoms

: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

May cause respiratory irritation.

Symptoms/effects after inhalation Symptoms/effects after skin contact Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects

1,12-Dodecanediol dimethacrylate (72829-09-5)

EC50 - Crustacea [1] > 100 mg/l Test organisms (species): Daphnia magna

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation Disposal must be done according to official regulations.

Sewage disposal recommendations Do not dispose of waste into sewer.

Product/Packaging disposal recommendations Dispose in a safe manner in accordance with local/national regulations.

Additional information Do not re-use empty containers.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

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DOT	TDG		IMDG	IATA
14.1. UN number				
UN3082	UN3082		3082	3082
14.2. Proper Shipping Name				
Environmentally hazardous substances, liquid, n.o.s. (1,12- Dodecanediol dimethacrylate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,12- DODECANEDIOL DIMETHACRYLATE)		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,12- DODECANEDIOL DIMETHACRYLATE)	Environmentally hazardous substance, liquid, n.o.s. (1,12- Dodecanediol dimethacrylate)
Transport document description				
UN3082 Environmentally hazardous substances, liquid, n.o.s. (1,12- Dodecanediol dimethacrylate), 9, III	HAZARDOUS SUBSTANCE,		UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,12- DODECANEDIOL DIMETHACRYLATE), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (1,12-Dodecanediol dimethacrylate), 9, III
14.3. Transport hazard class(es)			
9	9		9	9

14.4. Packing group				
III	III		III	III
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment	ent: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes
No supplementary information availab	le			

14.6. Special precautions for user

DOT UN-No. (DOT) : UN3082

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DOT Special Provisions (49 CFR 172.102)

: 8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies.

146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.

173 - An appropriate generic entry may be used for this material.

335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leak-proof when used as bulk packaging.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T4 - 2.65 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 155 DOT Packaging Non Bulk (49 CFR 173.xxx) 203 DOT Packaging Bulk (49 CFR 173.xxx) 241 No Limit

DOT Quantity Limitations Passenger aircraft/rail (49

CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49

CFR 175.75)

DOT Vessel Stowage Location

: No Limit

: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

TDG

UN-No. (TDG) : UN3082

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TDG Special Provisions

: 16 - 1) The technical name of the most dangerous substance related to the primary class must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(i)(A) of Part 3, Documentation. The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4, Dangerous Goods Safety Marks. 2) subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical: a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. An example in Canada is the "Food and Drugs Act".99 - (1) Mixtures of solids that are not dangerous goods and liquids or solids that are UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, may be handled, offered for transport or transported as UN3077 if there is no visible liquid when the dangerous goods are loaded into a means containment and during transport. (2) These Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2 (Classification), do not apply to the handling, offering for transport or transporting of less than 450 kg of UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, on a road vehicle or a railway vehicle. The dangerous goods must be contained in one or more small means of containment designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of the dangerous goods that could endanger public safety. SOR/2014-306 UN3077, UN3082 SOR/2014-306

Explosive Limit and Limited Quantity Index

Excepted quantities (TDG)

Emergency Response Guide (ERG) Number : 171

IMDG

Special provision (IMDG) : 274, 335, 375, 969

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : LP01, P001

Packing provisions (IMDG) : PP1

IBC packing instructions (IMDG) : IBC03

Tank instructions (IMDG) : T4

Tank special provisions (IMDG) : TP1, TP29

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

: 5 L

: E1

EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS

Stowage category (IMDG) : A

IATA

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L

Special provision (IATA) : A97, A158, A197, A215

ERG code (IATA) : 9L

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

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
1,12-Dodecanediol dimethacrylate	72829-09-5	Present	Active	

15.2. International regulations

CANADA

BIMAX® DDDMA (72829-09-5)

Listed on the Canadian NDSL (Non-Domestic Substances List)

1,12-Dodecanediol dimethacrylate (72829-09-5)

Listed on the Canadian NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Full text of h	hazard classes and H-statements		
H315	Causes skin irritation		
H317	May cause an allergic skin reaction		
H319	Causes serious eye irritation		
H335	May cause respiratory irritation	May cause respiratory irritation	
H400	Very toxic to aquatic life	Very toxic to aquatic life	
H410	Very toxic to aquatic life with long lasting effect	Very toxic to aquatic life with long lasting effects	

Abbreviations and acronyms

: Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor.

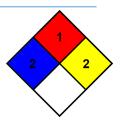
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NFPA health hazard

NFPA fire hazard NFPA reactivity

- : 2 Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- : 1 Materials that must be preheated before ignition can occur.
- : 2 Materials that readily undergo violent chemical change at elevated temperatures and pressures.



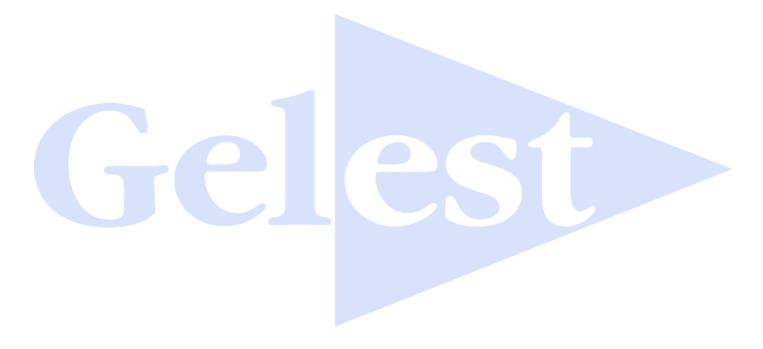
Store at < 5 °C.

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SDS US (GHS HazCom 2012) - Custom

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