

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 6/9/2025 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Substance Substance name : BIMAX® DDDMA

Chemical name : 1,12-DODECANEDIMETHACRYLATE

 EC-No.
 : 276-900-4

 CAS-No.
 : 72829-09-5

 Product code
 : 9191

 Formula (Override)
 : C20H34O4

Synonyms : 1,12-DODECANEDIYL BISMETHACRYLATE / 2-PROPENOIC ACID, 2-METHYL-, 1,1'-

(1,12-DODECANEDIYL) ESTER

Product group : Trade product

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals

Manufacture of substances

### 1.2.2. Uses advised against

No additional information available

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

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

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: Hazards identification**

# 2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Skin sensitisation, Category 1 H317
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Hazardous to the aquatic environment – Acute Hazard, Category 1 H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1 H410

Full text of H- and EUH-statements: see section 16

### Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

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#### 2.2. Label elements

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

Hazard pictograms (CLP)





GHS07

GHS09

Signal word (CLP) : Warning

Hazard statements (CLP) : 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 (CLP) : P261 - Avoid breathing fume, mist, spray, vapours.

P273 - Avoid release to the environment.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

P405 - Store locked up.

# 2.3. Other hazards

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

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

# **SECTION 3: Composition/information on ingredients**

# 3.1. Substances

Substance type: Mono-constituentName: BIMAX® DDDMACAS-No.: 72829-09-5EC-No.: 276-900-4

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,12-Dodecanediol dimethacrylate	CAS-No.: 72829-09-5 EC-No.: 276-900-4	≥ 95	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 H- and EUH-statements: see section 16

# 3.2. Mixtures

Not applicable

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

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

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

doctor 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.

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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 or a doctor if you feel unwell.

### 4.2. Most important symptoms and effects, both 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. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

# **SECTION 5: Firefighting measures**

#### 5.1. 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. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard. Hazardous decomposition products in case of fire : Toxic fumes may be released.

# 5.3. Advice for firefighters

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, vapours. 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.

### 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 without risks if possible.

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.

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# **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, vapours.

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.

### 7.3. Specific end use(s)

No additional information available

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

# 8.2.1. Appropriate engineering controls

### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

#### 8.2.2.1. Eye and face protection

### Eye protection:

Safety glasses

### 8.2.2.2. Skin protection

# Skin and body protection:

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

### Hand protection:

Protective gloves

### 8.2.2.3. Respiratory protection

# Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### **Environmental exposure controls:**

Avoid release to the environment.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Colorless to light yellow.

Appearance : Clear, colorless to light yellow liquid.

Molecular mass : 338.49 g/mol Odour : Not available Odour threshold : Not available Melting point : 5.5 °C : Not available Freezing point : Not available Boiling point : Non flammable. Flammability **Explosive limits** : Not available : Not available Lower explosion limit Upper explosion limit : Not available

Flash point :  $\approx 175$  °C @ 1013 hPa

Auto-ignition temperature : 280 °C

Decomposition temperature : Not available

pH : Not available

Viscosity, kinematic : Not available

Solubility : Insoluble in water.

Water: 11.1 µg/l @ 20 °C

Partition coefficient n-octanol/water (Log Kow) : Not available
Partition coefficient n-octanol/water (Log Pow) : 6.5 @ 40 °C
Vapour pressure : 0.002 Pa @ 25 °C
Vapour pressure at 50°C : Not available
Density : 0.954 g/cm³ @ 20 °C
Relative density : Not available

Relative density

Relative vapour density at 20°C

Particle characteristics

Rot available

Not available

# 9.2. Other information

# 9.2.1. Information with regard to physical hazard classes

No additional information available

# 9.2.2. Other safety characteristics

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.

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### 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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
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 sensitisation : May cause an allergic skin reaction.

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

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

# 11.2. Information on other hazards

## 11.2.1. Endocrine disrupting properties

No additional information available

### 11.2.2. Other information

Potential adverse human health effects and symptoms

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

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Hazardous to the aquatic environment, short-term

(acute)

: Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term

: Very toxic to aquatic life with long lasting effects.

(chronic)

### 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

# **BIMAX® DDDMA (72829-09-5)**

Partition coefficient n-octanol/water (Log Pow) 6.5 @ 40 °C

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# 12.4. Mobility in soil

No additional information available

# 12.5. Results of PBT and vPvB assessment

No additional information available

# 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment 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 ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID	
14.1. UN number or ID n	14.1. UN number or ID number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082	
14.2. UN proper shippin	14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	
Transport document descr	iption				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,12- DODECANEDIOL DIMETHACRYLATE), 9, III, (-)	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	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,12- DODECANEDIOL DIMETHACRYLATE), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,12- DODECANEDIOL DIMETHACRYLATE), 9, III	
14.3. Transport hazard o	14.3. Transport hazard class(es)				
9	9	9	9	9	
**************************************	**************************************	**************************************	**************************************	2	
14.4. Packing group					
III	III	III	III	III	

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ADR	IMDG	IATA	ADN	RID
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

### 14.6. Special precautions for user

**Overland transport** 

Classification code (ADR) : M6

Special provisions (ADR) : 274, 335, 375, 601, 650

Limited quantities (ADR) : 5I Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions : TP1, TP29

(ADR)

Tank code (ADR) : LGBV
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Loading, unloading : CV13

and handling (ADR)

Hazard identification number (Kemler No.) : 90

Orange plates :

90 3082

T4

Tunnel restriction code (ADR) :

Transport by sea

Tank instructions (IMDG)

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

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : LP01, P001

Special packing provisions (IMDG) : PP1

IBC packing instructions (IMDG) : IBC03

Tank special provisions (IMDG) : TP1, TP29
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A

Air transport

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 provisions (IATA) : A97, A158, A197, A215

ERG code (IATA) : 9L

Inland waterway transport

Classification code (ADN) : M6

Special provisions (ADN) : 274, 335, 375, 601, 650

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Limited quantities (ADN) : 5 L

Excepted quantities (ADN) : E1

Carriage permitted (ADN) : T

Equipment required (ADN) : PP

Number of blue cones/lights (ADN) : 0

#### Rail transport

Classification code (RID) : M6

Special provisions (RID) : 274, 335, 375, 601, 650

Limited quantities (RID) : 5L Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions : TP1, TP29

(RID)

Tank codes for RID tanks (RID) : LGBV

Transport category (RID) : 3

Special provisions for carriage – Packages (RID) : W12

Special provisions for carriage - Loading, unloading : CW13, CW31

and handling (RID)

Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 90

# 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

# **SECTION 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### 15.1.1. EU-Regulations

# **REACH Annex XVII (Restriction List)**

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	BIMAX® DDDMA ; 1,12- Dodecanediol dimethacrylate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	1,12-Dodecanediol dimethacrylate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

# **REACH Annex XIV (Authorisation List)**

Not listed on REACH Annex XIV (Authorisation List)

### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

# PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

### **POP Regulation (Persistent Organic Pollutants)**

Not listed on the POP list (Regulation EU 2019/1021)

### Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

# **Explosives Precursors Regulation (EU 2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

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### **Drug Precursors Regulation (EC 273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on the Canadian NDSL (Non-Domestic Substances List)

#### Germany

Air Quality Control (TA Luft)					
Category	Class	Applicable on	Local name	Max. mass flow	Max. mass concentration

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# **SECTION 16: Other information**

### 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

Other information : Store at < 5 °C.

Full text of H- and EUH-statements:		
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
Skin Sens. 1B	Skin sensitisation, category 1B	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	
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.	

SDS EU (REACH Annex II) - Custom v22

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