

## N,N'-Methylenebis(acrylamide), Biological reagent

Version number: GHS 1.0

Date of compilation: 2024-12-06

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

#### 1.1 Product identifier

Identification of the substance	<b>N,N'-Methylenebis(acrylamide), Biological reagent</b>
CAS number	110-26-9
Alternative number(s)	RM573

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

Relevant identified uses	Laboratory chemicals, Manufacture of substances
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#### 1.3 Details of the supplier of the safety data sheet

HiMedia Laboratories Pvt. Ltd.  
Plot No. C40, Road No. 21Y, Wagle Industrial Area, MIDC  
Thane West Maharashtra 400604  
India

Telephone: +91 22 69034800, +91 22 61169797

e-mail: info@himedialabs.com

Website: www.himedialabs.com

e-mail (competent person)	info@himedialabs.com (HiMedia Laboratories Pvt. Ltd)
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#### 1.4 Emergency telephone number

Emergency information service	+91 9321269711
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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
3.1O	acute toxicity (oral)	3	Acute Tox. 3	H301
3.1D	acute toxicity (dermal)	4	Acute Tox. 4	H312
3.5	germ cell mutagenicity	1	Muta. 1	H340
3.6	carcinogenicity	1	Carc. 1	H350
3.7	reproductive toxicity	2	Repr. 2	H361fd
3.9	specific target organ toxicity - repeated exposure	1	STOT RE 1	H372

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure.

#### 2.2 Label elements

Labelling

- Signal word              danger

## N,N'-Methylenebis(acrylamide), Biological reagent

Version number: GHS 1.0

Date of compilation: 2024-12-06

### - Pictograms

GHS06, GHS08



### - Hazard statements

H301	Toxic if swallowed.
H312	Harmful in contact with skin.
H340	May cause genetic defects.
H350	May cause cancer.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.

### - Precautionary statements

P201	Obtain special instructions before use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P312	Call a POISON CENTRE/doctor if you feel unwell.
P501	Dispose of contents/container to industrial combustion plant.

## 2.3 Other hazards

### Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

### Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Name of substance	N,N'-Methylenebis(acrylamide), Biological reagent
Identifiers	
CAS No	110-26-9
EC No	203-750-9

Specific Conc. Limits	M-Factors	ATE	Exposure route
-	-	100 mg/kg 1,100 mg/kg	oral dermal

Molecular formula	C <sub>7</sub> H <sub>10</sub> N <sub>2</sub> O <sub>2</sub>
Molar mass	154.17 g/mol

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

## **N,N'-Methylenebis(acrylamide), Biological reagent**

Version number: GHS 1.0

Date of compilation: 2024-12-06

Following skin contact

Rinse skin with water/shower.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.

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

none

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

Suitable extinguishing media

Water, Foam, ABC-powder

Unsuitable extinguishing media

Water jet

### **5.2 Special hazards arising from the substance or mixture**

Deposited combustible dust has considerable explosion potential.

Hazardous combustion products

Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

### **5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

### **6.2 Environmental precautions**

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

### **6.3 Methods and material for containment and cleaning up**

Advice on how to contain a spill

Covering of drains, Take up mechanically

Advice on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

### **6.4 Reference to other sections**

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## N,N'-Methylenebis(acrylamide), Biological reagent

Version number: GHS 1.0

Date of compilation: 2024-12-06

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

##### Recommendations

- Measures to prevent fire as well as aerosol and dust generation  
Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.
- Specific notes/details  
Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

##### Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

#### 7.2 Conditions for safe storage, including any incompatibilities

##### Managing of associated risks

- Explosive atmospheres  
Removal of dust deposits.
- Ventilation requirements  
Use local and general ventilation.
- Specific designs for storage rooms or vessels
- Storage temperature  
Recommended storage temperature: 10 – 30 °C
- Packaging compatibilities  
Only packagings which are approved (e.g. acc. to ADR) may be used.

#### 7.3 Specific end use(s)

See section 16 for a general overview.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)											
Coun-try	Name of agent	CAS No	Identi-fier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Nota-tion	Source
GB	dust		WEL		10					i	EH40/2005
GB	dust		WEL		4					r	EH40/2005

##### Notation

Ceiling-C	ceiling value is a limit value above which exposure should not occur
i	inhalable fraction
r	respirable fraction
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

## N,N'-Methylenebis(acrylamide), Biological reagent

Version number: GHS 1.0

Date of compilation: 2024-12-06

### 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

In the case of wanting to use the gloves again, clean them before taking off and air them well.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

Particulate filter device (EN 143).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	solid
Colour	White to almost white crystals or powder
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	not relevant (solid)
Flash point	not applicable
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	not applicable
Kinematic viscosity	not relevant
Solubility(ies)	not determined

Partition coefficient

Partition coefficient n-octanol/water (log value)	this information is not available
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## N,N'-Methylenebis(acrylamide), Biological reagent

Version number: GHS 1.0

Date of compilation: 2024-12-06

Vapour pressure	not determined
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### Density and/or relative density

Density	not determined
Relative vapour density	not relevant (solid)

Particle characteristics	no data available
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### 9.2 Other information

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
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### Other safety characteristics

Solid content	100 %
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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 Chemical stability

See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

#### Hints to prevent fire or explosion

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

### 10.5 Incompatible materials

Oxidisers

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Classification acc. to GHS

#### Acute toxicity

Toxic if swallowed. Harmful in contact with skin.

#### - Acute toxicity estimate (ATE)

Oral	100 mg/kg
Dermal	1,100 mg/kg

## **N,N'-Methylenebis(acrylamide), Biological reagent**

Version number: GHS 1.0

Date of compilation: 2024-12-06

### **Skin corrosion/irritation**

Shall not be classified as corrosive/irritant to skin.

### **Serious eye damage/eye irritation**

Shall not be classified as seriously damaging to the eye or eye irritant.

### **Respiratory or skin sensitisation**

Shall not be classified as a respiratory or skin sensitiser.

### **Germ cell mutagenicity**

May cause genetic defects.

### **Carcinogenicity**

May cause cancer.

### **Reproductive toxicity**

Suspected of damaging the unborn child. Suspected of damaging fertility.

### **Specific target organ toxicity - single exposure**

Shall not be classified as a specific target organ toxicant (single exposure).

### **Specific target organ toxicity - repeated exposure**

Causes damage to organs through prolonged or repeated exposure.

### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

## **11.2 Information on other hazards**

There is no additional information.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

Shall not be classified as hazardous to the aquatic environment.

### **12.2 Persistence and degradability**

Data are not available.

### **12.3 Bioaccumulative potential**

Data are not available.

### **12.4 Mobility in soil**

Data are not available.

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

According to the results of its assessment, this substance is not a PBT or a vPvB.

### **12.6 Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

### **12.7 Other adverse effects**

Data are not available.

## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

#### **Sewage disposal-relevant information**

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### **Waste treatment of containers/packages**

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

## N,N'-Methylenebis(acrylamide), Biological reagent

Version number: GHS 1.0

Date of compilation: 2024-12-06

### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

#### 14.1 UN number or ID number

ADR/RID	UN 2811
IMDG-Code	UN 2811
ICAO-TI	UN 2811

#### 14.2 UN proper shipping name

ADR/RID	TOXIC SOLID, ORGANIC, N.O.S.
IMDG-Code	TOXIC SOLID, ORGANIC, N.O.S.
ICAO-TI	Toxic solid, organic, n.o.s.
Technical name	N,N'-Methylenebis(acrylamide), Biological reagent

#### 14.3 Transport hazard class(es)

ADR/RID	6.1
IMDG-Code	6.1
ICAO-TI	6.1

#### 14.4 Packing group

ADR/RID	III
IMDG-Code	III
ICAO-TI	III

#### 14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

#### 14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

#### 14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

### Information for each of the UN Model Regulations

#### Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) - Additional information

Classification code	T2
Danger label(s)	6.1



Special provisions (SP)	274, 614, 802(ADN)
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
Transport category (TC)	2



## N,N'-Methylenebis(acrylamide), Biological reagent

Version number: GHS 1.0

Date of compilation: 2024-12-06

Tunnel restriction code (TRC)	E
Hazard identification No	60
Emergency Action Code	2X

### Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) - Additional information

Classification code	T2
Danger label(s)	6.1



Special provisions (SP)	274, 614, 802(ADN)
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
Transport category (TC)	2
Hazard identification No	60

### International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	-
Danger label(s)	6.1



Special provisions (SP)	223, 274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
EmS	F-A, S-A
Stowage category	A

### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s)	6.1
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Special provisions (SP)	A3, A5
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 kg

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

#### Deco-Paint Directive

VOC content	0 %
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## N,N'-Methylenebis(acrylamide), Biological reagent

Version number: GHS 1.0

Date of compilation: 2024-12-06

### Industrial Emissions Directive (IED)

VOC content	0 %
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### Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

### Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

### Water Framework Directive (WFD)

List of pollutants (WFD)			
Name of substance	CAS No	Listed in	Remarks
N,N'-Methylenebis(acrylamide), Biological reagent		a)	

#### Legend

a) Indicative list of the main pollutants

### Regulation on persistent organic pollutants (POP)

not listed

### National regulations (GB)

#### List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

not listed

### Restrictions according to GB REACH, Annex 17

not listed

### National inventories

Country	Inventory	Status
EU	REACH Reg.	substance is listed
US	TSCA	substance is listed (ACTIVE)

#### Legend

REACH Reg. REACH registered substances

TSCA Toxic Substance Control Act

## 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

## SECTION 16: Other information

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)

## N,N'-Methylenebis(acrylamide), Biological reagent

Version number: GHS 1.0

Date of compilation: 2024-12-06

Abbr.	Descriptions of used abbreviations
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EH40/2005	EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H301	Toxic if swallowed.
H312	Harmful in contact with skin.
H340	May cause genetic defects.
H350	May cause cancer.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.

## **N,N'-Methylenebis(acrylamide), Biological reagent**

Version number: GHS 1.0

Date of compilation: 2024-12-06

### **Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.