

Revision date 13-May-2021

Revision Number 2

## 1. IDENTIFICATION

### Product identifier

**Product Name** Piperazine Diacrylamide (PDA)

### Other means of identification

**Catalogue Number(s)** 1610202, 9701275

**Registration Number(s)** No information available

### Recommended use of the chemical and restrictions on use

**Recommended use** Laboratory chemicals

### Supplier's details

#### Corporate Headquarters

Bio-Rad Laboratories Inc.  
1000 Alfred Nobel Drive  
Hercules, CA 94547  
USA

#### Manufacturer

Bio-Rad Laboratories, Life Science Group  
2000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

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House 86-87, Udyog Vihar Phase  
IV Gurgaon 122005 Haryana India Bio-Rad  
Laboratories (Pty) Ltd.  
34 Bolton Road  
Parkwood, Johannesburg 2193  
South Africa

### Technical Service

India: 91-124-4029300 or 1-800-180-1224  
South Africa: 27-11-442-85-08  
India: support.india@bio-rad.com  
South Africa: cdg\_techsupport\_eemea@bio-rad.com

### Emergency telephone number

**24 Hour Emergency Phone Number** CHEMTREC India: 000-800-100-7141  
CHEMTREC South Africa: 0-800-983-611

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity — single exposure	Category 3

### GHS Label elements, including precautionary statements



**Signal word**

**Warning**

**Hazard statements**

Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Avoid breathing dust/fume/gas/mist/vapours/spray  
Use only outdoors or in a well-ventilated area  
Wear protective gloves/protective clothing/eye protection/face protection

**Eyes**

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

**Skin**

IF ON SKIN: Wash with plenty of water and soap

If skin irritation occurs: Get medical advice/attention

Take off all contaminated clothing and wash it before reuse

**Inhalation**

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Call a POISON CENTRE or doctor if you feel unwell

**Precautionary Statements - Storage**

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

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

**Other hazards which do not result in classification**

No information available

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Chemical name	CAS No	Weight-%
2-Propen-1-one, 1,1-(1,4-piperazinediyl)bis- 6342-17-2	6342-17-2	100

**4. FIRST AID MEASURES****Description of necessary first aid measures**

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur. Remove to fresh air.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.

**For emergency responders**

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

**Symptoms** May cause redness and tearing of the eyes. Burning sensation.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Note to doctors** Treat symptomatically.

## 5. FIREFIGHTING MEASURES

**Suitable Extinguishing Media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

**Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** No information available.

**Special protective actions for fire-fighters**

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

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

**Personal precautions** Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

**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** Pick up and transfer to properly labelled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**Other information** Refer to protective measures listed in Sections 7 and 8.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Take off contaminated clothing and wash it before reuse. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Avoid breathing vapours or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store according to product and label instructions.

**Incompatible materials** Strong acids. Strong bases. Strong oxidising 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** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** If splashes are likely to occur, wear safety glasses with side-shields.

**Skin and body protection** Long sleeved clothing. Wear suitable protective clothing.

**Hand protection** Impervious gloves. Wear suitable gloves.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Solid	<b>Odour</b>	Characteristic
<b>Appearance</b>	granules	<b>Odour threshold</b>	No information available
<b>Colour</b>	white		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>		No information available	
<b>Melting point / freezing point</b>	95 °C / 203 °F		
<b>Boiling point / boiling range</b>		No information available	
<b>Flash point</b>		No information available	
<b>Evaporation rate</b>		No information available	
<b>Flammability (solid, gas)</b>		No information available	
<b>Upper/lower flammability or explosive limits</b>			
<b>Upper flammability or explosive limits</b>	Not applicable		
<b>Lower flammability or explosive limits</b>	Not applicable		
<b>Vapour pressure</b>		No information available	
<b>Vapour density</b>		No information available	
<b>Relative density</b>		No information available	
<b>Solubility(ies)</b>			
<b>Water solubility</b>	Soluble in water		
<b>Solubility in other solvents</b>		No information available	
<b>Partition coefficient</b>		No information available	
<b>Autoignition temperature</b>		No information available	
<b>Decomposition temperature</b>		No information available	
<b>Viscosity</b>			
<b>Kinematic viscosity</b>		No information available	
<b>Dynamic viscosity</b>			

**Other information**

**Oxidising properties** Not applicable  
**Explosive properties** Not applicable

**10. STABILITY AND REACTIVITY****Reactivity**

**Reactivity** No information available.

**Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None  
**Sensitivity to static discharge** None.

**Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**Conditions to avoid**

**Conditions to avoid** None known based on information supplied.

**Incompatible materials**

**Incompatible materials** Strong acids. Strong bases. Strong oxidising agents.

**Hazardous decomposition products**

**Hazardous decomposition products** None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION****Information on the likely routes of exposure****Product Information**

**Inhalation** Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

**Eye contact** Irritating to eyes. Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components).

**Skin contact** Causes skin irritation. (based on components). Specific test data for the substance or mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

**Symptoms** Redness. May cause redness and tearing of the eyes.

**Acute toxicity****Numerical measures of toxicity**

**Delayed and immediate effects and also chronic effects from short and long term exposure**

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Irritating to skin.
<b>Serious eye damage/irritation</b>	Classification based on data available for ingredients. Causes serious eye irritation.
<b>Respiratory or skin sensitisation</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	May cause respiratory irritation.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**12. ECOLOGICAL INFORMATION****Toxicity**

<b>Ecotoxicity</b>	The environmental impact of this product has not been fully investigated.
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**Persistence and degradability**

No information available.

**Bioaccumulative potential**

No information available.

**Mobility**

<b>Mobility in soil</b>	No information available.
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<b>Mobility</b>	No information available.
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**Other adverse effects**

No information available.

**13. DISPOSAL CONSIDERATIONS****Disposal methods**

<b>Waste from residues/unused products</b>	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
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<b>Contaminated packaging</b>	Do not reuse empty containers.
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**14. TRANSPORT INFORMATION**

<b><u>IMDG</u></b>	Not regulated
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Transport in bulk according to Annex II of MARPOL and the IBC Code No information available

IATA Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

**Special precautions for user** Special provisions from the regulations relative to the specified mode of transport are noted by numeric code. Refer to the regulations for the full text of special provisions.

## 15. REGULATORY INFORMATION

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

#### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

#### International Inventories

Contact supplier for inventory compliance status

## 16. OTHER INFORMATION

**Prepared By** Bio-Rad Laboratories, Environmental Health and Safety

**Revision date** 13-May-2021

**Revision Note** \*\*\* Indicates this information has changed since the previous revision.

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

#### **Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

#### 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**