



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
The Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Revision date 27-Aug-2021

Revision Number 1.1

## 1. IDENTIFICATION

### Product identifier

**Product Name** UMETS by HPLC Elution Reagent

### Other means of identification

**Catalogue Number(s)** 1956045

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

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

**Recommended use** In-vitro laboratory reagent or component

### Supplier's details

#### Corporate Headquarters

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

#### Manufacturer

Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories Pvt. Ltd.  
Bio-Rad 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

### GHS Label elements, including precautionary statements

### Other hazards which do not result in classification

No information available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Substance

Not applicable

### Mixture

Chemical name	CAS No	Weight-%
Water 7732-18-5	7732-18-5	98.416
Ammonium acetate 631-61-8	631-61-8	1.54
Acetic acid 64-19-7	64-19-7	0.044

#### 4. FIRST AID MEASURES

##### Description of necessary first aid measures

Inhalation	Remove to fresh air.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Ingestion	Rinse mouth thoroughly with water.

##### For emergency responders

Self-protection of the first aider	No information available.
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##### Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
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##### Indication of immediate medical attention and special treatment needed, if necessary

Note to physicians	Treat symptomatically.
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#### 5. FIREFIGHTING MEASURES

##### Suitable Extinguishing Media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
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Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
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##### Specific hazards arising from the chemical

Specific hazards arising from the chemical	No information available.
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##### Special protective actions for fire-fighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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#### 6. ACCIDENTAL RELEASE MEASURES

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

Personal precautions	Ensure adequate ventilation.
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**Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

**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 labeled containers.

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

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL	Ontario	European Union	
Acetic acid 64-19-7	STEL: 15 ppm TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m <sup>3</sup>	TWA: 10 ppm STEL: 15 ppm	-	
Chemical name	China	Japan Society of Occupational Health	Korea	Australia	Taiwan
Acetic acid 64-19-7	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	TWA: 10 ppm STEL: 15 ppm	10 ppm 25 mg/m <sup>3</sup> 15 ppm STEL 37 ma/m <sup>3</sup> STEL	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 15 ppm STEL: 37.5 ma/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

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

**Eye/face protection** Wear safety glasses with side shields (or goggles).

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

**Hand protection** 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** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odour</b>	Odourless
<b>Appearance</b>	aqueous solution	<b>Odour threshold</b>	No information available
<b>Colour</b>	colourless		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
pH	6		
Melting point / freezing point	0 °C / 32 °F		
Boiling point / boiling range	100 °C / 212 °F		
Flash point		No information available	
Evaporation rate		No information available	
Flammability (solid, gas)		No information available	
Upper/lower flammability or explosive limits			
Upper flammability or explosive limits	Not applicable		
Lower flammability or explosive limits	Not applicable		
Vapour pressure		No information available	
Vapour density		No information available	
Relative density		No information available	
Solubility(ies)			
Water solubility	Miscible in water		
Solubility in other solvents		No information available	
Partition coefficient		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Viscosity			
Kinematic viscosity		No information available	
Dynamic viscosity			

**Other information**

**Oxidising 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** None known based on information supplied.

**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.

**Eye contact** Specific test data for the substance or mixture is not available.

**Skin contact** Specific test data for the substance or mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available.

**Symptoms** No information available.

### Acute toxicity

#### Numerical measures of toxicity

1.54 % of the mixture consists of ingredient(s) of unknown acute oral toxicity  
 1.54 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity  
 1.54 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)  
 1.54 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)  
 1.54 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg ( Rat )	-	-
Acetic acid	= 3310 mg/kg ( Rat )	= 1060 mg/kg ( Rabbit )	= 11.4 mg/L ( Rat ) 4 h

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

**Skin corrosion/irritation** No information available.

**Serious eye damage/irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

## 12. ECOLOGICAL INFORMATION

### Toxicity

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Ecotoxicity**

Chemical name	Algae/aquatic plants	Fish	Crustacea
Ammonium acetate	-	LC50: =1.06mg/L (48h, <i>Cyprinus carpio</i> )	-
Acetic acid	-	LC50: =75mg/L (96h, <i>Lepomis macrochirus</i> ) LC50: =79mg/L (96h, <i>Pimephales promelas</i> )	EC50: =47mg/L (24h, <i>Daphnia magna</i> ) EC50: =65mg/L (48h, <i>Daphnia magna</i> )

**Persistence and degradability**

No information available.

**Bioaccumulative potential**

There is no data for this product.

**Mobility**

**Mobility in soil** No information available.

**Mobility** No information available.

Chemical name	Partition coefficient
Acetic acid	-0.31

**Other adverse effects**

No information available.

### 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

### 14. TRANSPORT INFORMATION

**IMDG** Not regulated  
**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** 27-Aug-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**