

## 08.08.2020 Kit components

Product code	Description
1580100 1580150	Media Sampler Kit
Components:	
1560023	Macro-Prep® DEAE Media
1560030	Macro-Prep® High S Media
1580040	Macro-Prep High Q Support
1560101	UNOsphere™ Q Support
1560111	UNOsphere <sup>TM</sup> S#Cation Exchange Resin
1560211	UNOsphere™ rapid S Cation Exchange Media
1588000	CHT Ceramic Hydroxyapatite Type I (20 um, 40 um, 80 um)
1572000	CHT Ceramic Hydroxyapatite Type II (20 um, 40 um, 80 um)
1585200	CFT Type II (40 um)
1560218	UNOsphere SUPrA Affinity Chromatography Media





Printing date 08.08.2020 Revision: 29.07.2020

Not classified as hazardous according to criteria of Safe Work Australia.

#### 1 Identification

- · Product identifier
- · Trade name: Macro-Prep® DEAE Media
- · Article number: 1560023, 1560022, 1560021, 1560020, 1580020, 1560020EDU, 1580020EDU
- Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Bio-Rad Laboratories Pty. Ltd Level 5, 446 Victoria Road

Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia @bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

#### 2 Hazard(s) Identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonised System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable
- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

## 3 Composition and Information on Ingredients

- · Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

64-17-5 ethanol

Flam. Liq. 2, H225 Eye Irrit. 2A, H319 5-<10%

· Additional information For the wording of the listed hazard phrases refer to section 16.

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# Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 29.07.2020

Trade name: Macro-Prep® DEAE Media

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#### 4 First Aid Measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

#### 5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Dilute with plenty of water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and Storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

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Printing date 08.08.2020 Revision: 29.07.2020

Trade name: Macro-Prep® DEAE Media

(Contd. of page 2)

### 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

64-17-5 ethanol

WES Long-term value: 1880 mg/m³, 1000 ppm

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures should be adhered to when handling chemicals.

- · Breathing equipment: Not required.
- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

9 Physica	l and C	hemical	Proper	ties
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· Information on basic physical and c	hemical properties	
· General Information		
· Appearance:		
Form:	Solid.	
Colour:	White	
· Odour:	Alcohol-like	
· Odour threshold:	Not determined.	
· pH-value:	Not determined.	
· Change in condition Melting point/freezing point: Initial boiling point and boiling ran	undetermined nge: undetermined	
· Flash point:	Not applicable Not determined.	
· Flammability (solid, gaseous)	Not applicable.	
· Ignition temperature:	425 °C	
· Decomposition temperature:	Not determined.	
· Self igniting:	Product is not selfigniting.	
· Explosive properties:	Not determined.	

(Contd. on page 4)





Printing date 08.08.2020 Revision: 29.07.2020

Trade name: Macro-Prep® DEAE Media

	(Contd. of	page
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
· Density at 20 °C:	0.95 g/cm³	
· Relative density	Not determined.	
· Vapour density	Not determined.	
Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	8.4 %	
Water:	51.6 %	
· Other information	No further relevant information available.	

## 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

## 11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity
- · LD/LC50 values that are relevant for classification:

### 64-17-5 ethanol

 Oral
 LD50
 7,060 mg/kg (rat)

 Inhalative
 LC50/4 h
 20,000 mg/l (rat)

- Primary irritant effect:
- · Skin corrosion/irritation No irritant effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.

(Contd. on page 5)





Printing date 08.08.2020 Revision: 29.07.2020

Trade name: Macro-Prep® DEAE Media

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Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

### 12 Ecological Information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation Dispose of waste in accordance to applicable national, regional, or local regulations.
- Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number		
ADG, ADN, IMDG, IATA	Not Reguated	
UN proper shipping name		
ADG	Not Reguated	
	Not Reguated	
ADN, IMDG, IATA	Not Reguated	
Transport hazard class(es)		
ADG, ADN, IMDG, IATA		
Class	Not Reguated	
Packing group		
ADG, IMDG, IATA	Not Reguated	
Environmental hazards:		
Marine pollutant:	No	





Revision: 29.07.2020 Printing date 08.08.2020

Trade name: Macro-Prep® DEAE Media

	(Contd. of page 5)
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Marpol and IBC Code	<b>d the</b> Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Not Reguated

## 15 Regulatory information

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

· Australian Inventory of Chemical Substances 7732-18-5 water 64-17-5 ethanol

· Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

· Australia: Priority Existing Chemicals

None of the ingredients is listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · National regulations
- · Technical instructions (air):

Class	Share in %
NK	5-<10

- · Water hazard class: Generally not hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000 (Contd. on page 7)



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### Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 29.07.2020

Trade name: Macro-Prep® DEAE Media

(Contd. of page 6)

#### · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

\* Data compared to the previous version altered.





Printing date 08.08.2020 Revision: 29.07.2020

Not classified as hazardous according to criteria of Safe Work Australia.

#### 1 Identification

- · Product identifier
- · Trade name: Macro-Prep® High S Media
- · Article number: 1560030, 1560031, 1560032, 1560033, 1580030, 1560034, 1560035, 1560038
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

  Bio-Rad Laboratories Pty

Bio-Rad Laboratories Pty. Ltd Level 5, 446 Victoria Road Gladesville NSW 2111

Australia

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia@bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

#### 2 Hazard(s) Identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonised System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable
- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · **vPvB:** Not applicable.

## 3 Composition and Information on Ingredients

- · Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

64-17-5 ethanol

Flam. Liq. 2, H225 Eye Irrit. 2A, H319 5-<10%

· Additional information For the wording of the listed hazard phrases refer to section 16.

(Contd. on page 2)



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# Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 29.07.2020

Trade name: Macro-Prep® High S Media

(Contd. of page 1)

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#### 4 First Aid Measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Dilute with plenty of water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and Storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

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Printing date 08.08.2020 Revision: 29.07.2020

Trade name: Macro-Prep® High S Media

(Contd. of page 2)

## 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

64-17-5 ethanol

WES Long-term value: 1880 mg/m³, 1000 ppm

- · Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures should be adhered to when handling chemicals.

- · Breathing equipment: Not required.
- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

9 Ph	ysical	and	Chem	ical P	ropert	ies

· Information on basic physical and	chemical properties
· General Information	
· Appearance:	
Form:	Suspension
Colour:	White
· Odour:	Odourless
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition Melting point/freezing point: Initial boiling point and boiling ra	undetermined ange: undetermined
· Flash point:	Not applicable Not determined.
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	425 °C
· Decomposition temperature:	Not determined.
· Self igniting:	Product is not selfigniting.
· Explosive properties:	Not determined.

(Contd. on page 4)





Printing date 08.08.2020 Revision: 29.07.2020

Trade name: Macro-Prep® High S Media

	(Contd. of page 3)
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density at 20 °C:	0.95 g/cm³
· Relative density	Not determined.
· Vapour density	Not determined.
Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Fully miscible
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
· Solvent content:	
Organic solvents:	8.4 %
Water:	51.6 %
· Other information	No further relevant information available.

## 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

## 11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity
- · LD/LC50 values that are relevant for classification:

#### 64-17-5 ethanol

 Oral
 LD50
 7,060 mg/kg (rat)

 Inhalative
 LC50/4 h
 20,000 mg/l (rat)

- Primary irritant effect:
- · Skin corrosion/irritation No irritant effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.

(Contd. on page 5)





Printing date 08.08.2020 Revision: 29.07.2020

Trade name: Macro-Prep® High S Media

(Contd. of page 4)

· Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

### 12 Ecological Information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation Dispose of waste in accordance to applicable national, regional, or local regulations.
- Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

· UN-Number		
· ADG, ADN, IMDG, IATA	Not Reguated	
· UN proper shipping name		
· ADG	Not Reguated	
	Not Reguated	
· ADN, IMDG, IATA	Not Reguated	
· Transport hazard class(es)		
· ADG, ADN, IMDG, IATA		
· Class	Not Reguated	
· Packing group		
· ADG, IMDG, IATA	Not Reguated	
· Environmental hazards:		
· Marine pollutant:	No	





Revision: 29.07.2020 Printing date 08.08.2020

Trade name: Macro-Prep® High S Media

	(Contd. of page 5
· Special precautions for user	Not applicable.
<ul> <li>Transport in bulk according to Annex II of Marpol and IBC Code</li> </ul>	d the Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Not Reguated

#### 15 Regulatory information

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

· Australian Inventory of Chemical Substances 7732-18-5 water 64-17-5 ethanol

· Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

· Australia: Priority Existing Chemicals

None of the ingredients is listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · National regulations
- · Technical instructions (air):

Class	Share in %
NK	5-<10

- · Water hazard class: Generally not hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000 (Contd. on page 7)



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### Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 29.07.2020

Trade name: Macro-Prep® High S Media

(Contd. of page 6)

#### · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

\* Data compared to the previous version altered.





Printing date 08.08.2020 Revision: 11.07.2019

Not classified as hazardous according to criteria of Safe Work Australia.

#### 1 Identification

- · Product identifier
- · Trade name: Macro-Prep High Q Support
- · Article number:

1580040, 1560041, 1560042, 1560043, 1560040, 1560040EDU, 9703677, 10041487, 10041491, 10041490, 10041489, 10041488, 10041486, 9702224, 10047740, 10047741, 10047743, 10047744, 1580040-3HT, 1560040-3HT, 1560041-3HT, 1560042-3HT, 1560043-3HT

- · Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Laboratory chemicals
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories Pty. Ltd Level 5, 446 Victoria Road Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia@bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

#### 2 Hazard(s) Identification

- Classification of the substance or mixture
   The product is not classified, according to the Globally Harmonised System (GHS).
- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable
- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

#### 3 Composition and Information on Ingredients

- · Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

64-17-5 ethanol

Flam. Liq. 2, H225 Eye Irrit. 2A, H319 ≥5-<10%

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# Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 11.07.2019

Trade name: Macro-Prep High Q Support

(Contd. of page 1)

· Additional information For the wording of the listed hazard phrases refer to section 16.

## **4 First Aid Measures**

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and Storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.

(Contd. on page 3)





Printing date 08.08.2020 Revision: 11.07.2019

Trade name: Macro-Prep High Q Support

· Specific end use(s) No further relevant information available.

(Contd. of page 2)

### 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

#### 64-17-5 ethanol

NES Long-term value: 1880 mg/m³, 1000 ppm WES Long-term value: 1880 mg/m³, 1000 ppm

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures should be adhered to when handling chemicals.

- · Breathing equipment: Not required.
- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

#### 9 Physical and Chemical Properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Suspension
Colour: White
Odour: Odourless
Odour threshold: Not determined.

· pH-value:

Not determined.

· Change in condition

Melting point/freezing point: undetermined

Initial boiling point and boiling range: 78 °C

· Flash point: Not determined.

· Flammability (solid, gaseous) Not applicable.

· Ignition temperature: 425 °C

· Decomposition temperature: Not determined.

· **Self igniting:** Product is not selfigniting.

(Contd. on page 4)





Printing date 08.08.2020 Revision: 11.07.2019

Trade name: Macro-Prep High Q Support

	(Contd. of page
· Explosive properties:	Not determined.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density at 20 °C:	0.98946 g/cm³
Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Fully miscible
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
· Solvent content:	
Organic solvents:	8.4 %
Water:	51.6 %
Solids content:	40.0 %
· Other information	No further relevant information available.

## 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

### 11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity
- · LD/LC50 values that are relevant for classification:

#### 64-17-5 ethanol

		7,060 mg/kg (rat)
Inhalative	LC50/4 h	20,000 mg/l (rat)

(Contd. on page 5)



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### Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 11.07.2019

Trade name: Macro-Prep High Q Support

(Contd. of page 4)

- · Primary irritant effect:
- · Skin corrosion/irritation No irritant effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

### 12 Ecological Information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes: Generally not hazardous for water.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

#### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation Dispose of waste in accordance to applicable national, regional, or local regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number		
ADG, ADN, IMDG, IATA	Not Reguated	
UN proper shipping name ADG, ADN, IMDG, IATA	Not Reguated	
Transport hazard class(es)		
ADG, ADN, IMDG, IATA		
Class	Not Reguated	
Packing group		
ADG, IMDG, IATA	Not Reguated	





Printing date 08.08.2020 Revision: 11.07.2019

Trade name: Macro-Prep High Q Support

	(Contd. of page 5)
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
<ul> <li>Transport in bulk according to Annex II of Marpol an IBC Code</li> </ul>	nd the Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Not Reguated

### 15 Regulatory information

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

· Australian Inventory of Chemical Substances

64-17-5 ethanol

7732-18-5 water

· Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

· Australia: Priority Existing Chemicals

None of the ingredients is listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · National regulations
- · Technical instructions (air):

Class	Share in %
NK	5-10

- · Water hazard class: Generally not hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

- · Department issuing SDS: Environmental Health and Safety.
- Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

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### Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 11.07.2019

Trade name: Macro-Prep High Q Support

(Contd. of page 6)

#### · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

\* Data compared to the previous version altered.





Printing date 08.08.2020 Revision: 07.08.2020

Hazardous according to criteria of Safe Work Australia.

#### 1 Identification

- · Product identifier
- Trade name: UNOsphere™ Q Support
- · Article number: 1560101, 1560103, 1560105, 1560107
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories Pty. Ltd Level 5, 446 Victoria Road Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia@bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

#### 2 Hazard(s) Identification

· Classification of the substance or mixture

Eye Irrit. 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms



- · Signal word Warning
- · Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash thoroughly after handling.
P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.

(Contd. on page 2)



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# Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ Q Support

· vPvB: Not applicable.

(Contd. of page 1)

#### 3 Composition and Information on Ingredients

- · Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

64-17-5 ethanol

Flam. Liq. 2, H225 Eye Irrit. 2A, H319 10-20%

· Additional information For the wording of the listed hazard phrases refer to section 16.

#### 4 First Aid Measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

#### 5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

#### 6 Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

(Contd. on page 3)

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# Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ Q Support

(Contd. of page 2)

#### 7 Handling and Storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

#### 64-17-5 ethanol

WES Long-term value: 1880 mg/m³, 1000 ppm

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Safety glasses

Tightly sealed goggles.

### 9 Physical and Chemical Properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Solid.
Colour: White

(Contd. on page 4)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ Q Support

	(Contd. of pa
Odour: Odour threshold:	Odourless Not determined.
pH-value:	Not applicable.
Change in condition Melting point/freezing point: Initial boiling point and boiling range	undetermined : undetermined
Flash point:	Not applicable Not determined.
Flammability (solid, gaseous)	Not determined.
Ignition temperature:	425 °C
Decomposition temperature:	Not determined.
Self igniting:	Product is not selfigniting.
Explosive properties:	Not determined.
Explosion limits: Lower: Upper:	3.5 Vol % 15 Vol %
Vapour pressure at 20 °C:	59 hPa
Density: Relative density Vapour density Evaporation rate	Not determined Not determined. Not applicable. Not applicable.
Solubility in / Miscibility with Water:	Dispersible
Partition coefficient: n-octanol/water:	Not determined.
Viscosity: dynamic: kinematic:	Not applicable. Not applicable.
Solvent content: Organic solvents: Water:	13.8 % 69.0 %
Solids content: Other information	17.2 % No further relevant information available.

## 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known

(Contd. on page 5)



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# Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ Q Support

(Contd. of page 4)

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

#### 11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity
- · LD/LC50 values that are relevant for classification:

#### 64-17-5 ethanol

Oral LD50 7,060 mg/kg (rat)
Inhalative LC50/4 h 20,000 mg/l (rat)

- · Primary irritant effect:
- · Skin corrosion/irritation Irritant to skin and mucous membranes.
- · Serious eye damage/irritation Irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.
- Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

### 12 Ecological Information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

#### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation Dispose of waste in accordance to applicable national, regional, or local regulations.

(Contd. on page 6)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ Q Support

(Contd. of page 5)

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

Transport information	
UN-Number ADG, ADN, IMDG, IATA	Not Reguated
UN proper shipping name ADG ADN, IMDG, IATA	Not Reguated Not Reguated Not Reguated
Transport hazard class(es)	
ADG, ADN, IMDG, IATA Class	Not Reguated
Packing group ADG, IMDG, IATA	Not Reguated
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of Mar IBC Code	rpol and the Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Not Reguated

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- Australian Inventory of Chemical Substances
   7732-18-5 water
   64-17-5 ethanol
   7647-14-5 sodium chloride
  - · Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

· Australia: Priority Existing Chemicals

None of the ingredients is listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.

(Contd. on page 7)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ Q Support

(Contd. of page 6)

- · National regulations
- · Technical instructions (air):

Class	Share in %
NK	10-20

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

· \* Data compared to the previous version altered.

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Printing date 08.08.2020 Revision: 07.08.2020

Hazardous according to criteria of Safe Work Australia.

#### 1 Identification

- · Product identifier
- · Trade name: UNOsphere™ SCation Exchange Resin
- · Article number: 1560111, 1560113, 1560115, 1560117
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories Pty. Ltd Level 5, 446 Victoria Road Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia @bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

#### 2 Hazard(s) Identification

· Classification of the substance or mixture

Eye Irrit. 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms



- · Signal word Warning
- · Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash thoroughly after handling.
P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.

(Contd. on page 2)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ SCation Exchange Resin

· **vPvB:** Not applicable.

(Contd. of page 1)

### 3 Composition and Information on Ingredients

- · Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

64-17-5 ethanol

Flam. Liq. 2, H225 Eye Irrit. 2A, H319 10-20%

· Additional information For the wording of the listed hazard phrases refer to section 16.

#### 4 First Aid Measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

#### 5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

#### 6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

AU



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# Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ SCation Exchange Resin

(Contd. of page 2)

#### 7 Handling and Storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

#### 64-17-5 ethanol

WES Long-term value: 1880 mg/m³, 1000 ppm

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- · Breathing equipment: Not necessary if room is well-ventilated.
- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Safety glasses

Tightly sealed goggles.

### 9 Physical and Chemical Properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Solid.

(Contd. on page 4)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ SCation Exchange Resin

	(Contd. of page
Colour: · Odour:	White Alcohol-like
· Odour threshold:	Not determined.
· pH-value at 20 °C:	7
· Change in condition Melting point/freezing point: Initial boiling point and boiling range	undetermined : undetermined
· Flash point:	Not applicable Not determined.
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	425 °C
Decomposition temperature:	Not determined.
· Self igniting:	Product is not selfigniting.
· Explosive properties:	Not determined.
· Explosion limits: Lower: Upper:	3.5 Vol % 15 Vol %
· Vapour pressure at 20 °C:	59 hPa
· Density: · Relative density · Vapour density · Evaporation rate	Not determined Not determined. Not determined. Not determined.
· Solubility in / Miscibility with Water:	Dispersible
Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: dynamic: kinematic:	Not determined. Not determined.
· Solvent content: Organic solvents: Water:	13.8 % 69.0 %
Solids content: Other information	17.2 % No further relevant information available.

## 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

(Contd. on page 5)



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### Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ SCation Exchange Resin

(Contd. of page 4)

- Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

#### 11 Toxicological Information

- Information on toxicological effects
- · Acute toxicity
- · LD/LC50 values that are relevant for classification:

#### 64-17-5 ethanol

Oral 7,060 mg/kg (rat) LD50 Inhalative LC50/4 h 20,000 mg/l (rat)

- · Primary irritant effect:
- · Skin corrosion/irritation Irritant to skin and mucous membranes.
- · Serious eye damage/irritation Irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

### 12 Ecological Information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB**: Not applicable.
- · Other adverse effects No further relevant information available.

#### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation Dispose of waste in accordance to applicable national, regional, or local regulations.

(Contd. on page 6)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ SCation Exchange Resin

(Contd. of page 5)

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information	
· UN-Number · ADG, ADN, IMDG, IATA	Not Reguated
· UN proper shipping name · ADG, ADN, IMDG, IATA	Not Reguated
· Transport hazard class(es)	
· ADG, ADN, IMDG, IATA · Class	Not Reguated
· Packing group · ADG, IMDG, IATA	Not Reguated
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Ma IBC Code	rpol and the Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Australian Inventory of Chemical Substances

7732-18-5 water

64-17-5 ethanol

7647-14-5 sodium chloride

· Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

· Australia: Priority Existing Chemicals

None of the ingredients is listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.

(Contd. on page 7)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ SCation Exchange Resin

(Contd. of page 6)

- · National regulations
- · Technical instructions (air):

Class	Share in %
NK	10-20

- · Water hazard class: Generally not hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids - Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

· \* Data compared to the previous version altered.

ΑU





Printing date 08.08.2020 Revision: 07.08.2020

Hazardous according to criteria of Safe Work Australia.

#### 1 Identification

- · Product identifier
- · Trade name: UNOsphere™ rapid S Cation Exchange Media
- · Article number: 1560211, 1560213, 1560215, 1560217, 10006739
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories Pty. Ltd Level 5, 446 Victoria Road Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia @bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

### 2 Hazard(s) Identification

· Classification of the substance or mixture

Eye Irrit. 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms



- · Signal word Warning
- · Hazard statements

H319 Causes serious eye irritation.

· Precautionary statements

P264 Wash thoroughly after handling.
P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.

(Contd. on page 2)



Page 2/7

## Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ rapid S Cation Exchange Media

· vPvB: Not applicable.

(Contd. of page 1)

### 3 Composition and Information on Ingredients

- · Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

64-17-5 ethanol

Flam. Liq. 2, H225 Eye Irrit. 2A, H319 10-20%

· Additional information For the wording of the listed hazard phrases refer to section 16.

### 4 First Aid Measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

#### 6 Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

(Contd. on page 3)



Page 3/7

## Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ rapid S Cation Exchange Media

(Contd. of page 2)

### 7 Handling and Storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

### 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

#### 64-17-5 ethanol

WES Long-term value: 1880 mg/m³, 1000 ppm

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Safety glasses

Tightly sealed goggles.

### 9 Physical and Chemical Properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Solid.
Colour: White

(Contd. on page 4)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ rapid S Cation Exchange Media

	(Contd. of page
Odour: Odour threshold:	Alcohol-like Not determined.
pH-value:	Not applicable.
Change in condition Melting point/freezing point: Initial boiling point and boiling range	undetermined : undetermined
Flash point:	Not applicable Not determined.
Flammability (solid, gaseous)	Not determined.
Ignition temperature:	425 °C
Decomposition temperature:	Not determined.
Self igniting:	Product is not selfigniting.
Explosive properties:	Not determined.
Explosion limits: Lower: Upper:	3.5 Vol % 15 Vol %
Vapour pressure at 20 °C:	59 hPa
Density: Relative density Vapour density Evaporation rate	Not determined Not determined. Not applicable. Not applicable.
Solubility in / Miscibility with Water:	Dispersible
Partition coefficient: n-octanol/water:	Not determined.
Viscosity: dynamic: kinematic:	Not applicable. Not applicable.
Solvent content: Organic solvents: Water:	17.3 % 76.2 %
Solids content: Other information	7.1 % No further relevant information available.

### 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known

(Contd. on page 5)



Page 5/7

## Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ rapid S Cation Exchange Media

(Contd. of page 4)

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

### 11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity
- · LD/LC50 values that are relevant for classification:

#### 64-17-5 ethanol

Oral LD50 7,060 mg/kg (rat)
Inhalative LC50/4 h 20,000 mg/l (rat)

- · Primary irritant effect:
- · Skin corrosion/irritation Irritant to skin and mucous membranes.
- · Serious eye damage/irritation Irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

### 12 Ecological Information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation Dispose of waste in accordance to applicable national, regional, or local regulations.

(Contd. on page 6)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ rapid S Cation Exchange Media

(Contd. of page 5)

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

Transport information	
UN-Number ADG, ADN, IMDG, IATA	Not Reguated
UN proper shipping name ADG ADN, IMDG, IATA	Not Reguated Not Reguated Not Reguated
Transport hazard class(es)	
ADG, ADN, IMDG, IATA Class	Not Reguated
Packing group ADG, IMDG, IATA	Not Reguated
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of Mar IBC Code	rpol and the Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Not Reguated

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Australian Inventory of Chemical Substances

7732-18-5 water

64-17-5 ethanol

· Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

· Australia: Priority Existing Chemicals

None of the ingredients is listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.

(Contd. on page 7)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: UNOsphere™ rapid S Cation Exchange Media

(Contd. of page 6)

- · National regulations
- · Technical instructions (air):

Class	Share in %
NK	10-20

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

· \* Data compared to the previous version altered.

ΑU

Page 1/6

## Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Not classified as hazardous according to criteria of Safe Work Australia.

### 1 Identification

- · Product identifier
- · Trade name: CHT™ Ceramic Hydroxyapatite Type I (20 um, 40 um, 80 um)
- · Article number:

1588000, 1570080, 1570081, 1570085, 1570089, 1570084, 1582000, 1570020, 1570021, 1570029, 1584000, 1570040, 1570041, 1570045, 1570049, 1570044, 9704527, 1570025

· CAS Number:

1306-06-5

· EC number:

215-145-7

 $\cdot$  Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories Pty. Ltd

Level 5, 446 Victoria Road

Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia@bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

### 2 Hazard(s) Identification

· Classification of the substance or mixture

The substance is not classified, according to the Globally Harmonised System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable
- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

### 3 Composition and Information on Ingredients

- · Chemical characterisation: Substances
- · CAS No. Description:

1306-06-5 Hydroxyapatite (Ca10(PO4)6(OH)2)

(Contd. on page 2)



Page 2/6

## Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CHT™ Ceramic Hydroxyapatite Type I (20 um, 40 um, 80 um)

(Contd. of page 1)

- · Identification number(s):
- · EC number: 215-145-7
- · Additonal information: For the wording of the listed risk phrases refer to section 16.

### 4 First Aid Measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

### 6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and Storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.

(Contd. on page 3)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CHT™ Ceramic Hydroxyapatite Type I (20 um, 40 um, 80 um)

(Contd. of page 2)

· Specific end use(s) No further relevant information available.

### 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls

Explosion limits: Lower:

Upper:

- · Personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures should be adhered to when handling chemicals.

· Protection of hands: Protective gloves.

9 Physical and Chemical Properties

- · Material of gloves Synthetic gloves
- · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

· Information on basic physical and o · General Information	hemical properties
· Appearance:	
Form:	Granulate
Colour:	White
· Odour:	Odourless
· Odour threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition Melting point/freezing point: Initial boiling point and boiling ran	1,100 °C nge: undetermined
· Flash point:	Not applicable Not determined.
· Flammability (solid, gaseous)	Product is not flammable.
· Decomposition temperature:	Not determined.
· Self igniting:	Not determined.
· Explosive properties:	Not determined.

Not determined.

Not determined.

(Contd. on page 4)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CHT™ Ceramic Hydroxyapatite Type I (20 um, 40 um, 80 um)

	(C	ontd. of page 3
· Vapour pressure:	Not applicable.	
· Density at 20 °C:	3.14 g/cm³	
· Relative density	Not determined.	
· Vapour density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water:	Insoluble	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
dynamic:	Not applicable.	
kinematic:	Not applicable.	
Solids content:	100.0 %	
· Other information	No further relevant information available.	

### 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

### 11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity
- Primary irritant effect:
- · Skin corrosion/irritation No irritant effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

### 12 Ecological Information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.

(Contd. on page 5)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CHT™ Ceramic Hydroxyapatite Type I (20 um, 40 um, 80 um)

(Contd. of page 4)

- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes: Generally not hazardous for water.
- Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information	
· UN-Number · ADG, ADN, IMDG, IATA	Not Reguated
· UN proper shipping name · ADG, ADN, IMDG, IATA	Not Reguated
· Transport hazard class(es)	
· ADG, ADN, IMDG, IATA · Class	Not Reguated
· Packing group · ADG, IMDG, IATA	Not Reguated
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Marpol and the IBC Code	ne Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Not Reguated

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Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CHT™ Ceramic Hydroxyapatite Type I (20 um, 40 um, 80 um)

(Contd. of page 5)

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Australian Inventory of Chemical Substances

Substance is listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

Substance is not listed.

- · Directive 2012/18/EU
- Named dangerous substances ANNEX I Substance is not listed.
- · National regulations
- · Water hazard class: Generally not hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· \* Data compared to the previous version altered.

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Page 1/6

## Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Not classified as hazardous according to criteria of Safe Work Australia.

### 1 Identification

- · Product identifier
- · Trade name: CHT™ Ceramic Hydroxyapatite Type II (20 um, 40 um, 80 um)
- · Article number:

1572000, 1572100, 1572500, 1582200, 1574100, 1574000, 1574500, 1584200, 1584004, 1578100, 1578500, 1588200, 1578004

· CAS Number:

1306-06-5

· EC number:

215-145-7

· Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories Pty. Ltd

Level 5, 446 Victoria Road

Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia @bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

### 2 Hazard(s) Identification

· Classification of the substance or mixture

The substance is not classified, according to the Globally Harmonised System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable
- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

### 3 Composition and Information on Ingredients

- · Chemical characterisation: Substances
- · CAS No. Description:

1306-06-5 Hydroxyapatite (Ca10(PO4)6(OH)2)

(Contd. on page 2)



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## Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CHT™ Ceramic Hydroxyapatite Type II (20 um, 40 um, 80 um)

(Contd. of page 1)

- · Identification number(s):
- · EC number: 215-145-7
- · Additonal information: For the wording of the listed risk phrases refer to section 16.

### 4 First Aid Measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

### 6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and Storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.

(Contd. on page 3)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CHT™ Ceramic Hydroxyapatite Type II (20 um, 40 um, 80 um)

(Contd. of page 2)

· Specific end use(s) No further relevant information available.

### 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures should be adhered to when handling chemicals.

- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

Physical and Chemical Properties	
· Information on basic physical and ch · General Information	emical properties
· Appearance: Form:	Solid.
Colour:	White
· Odour:	Odourless
· Odour threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition Melting point/freezing point: Initial boiling point and boiling rang	1,100 °C <b>je:</b> undetermined
· Flash point:	Not applicable
· Flammability (solid, gaseous)	Product is not flammable.
· Decomposition temperature:	Not determined.
· Self igniting:	Not determined.
· Explosive properties:	Not determined.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not applicable.

(Contd. on page 4)





Revision: 07.08.2020 Printing date 08.08.2020

Trade name: CHT™ Ceramic Hydroxyapatite Type II (20 um, 40 um, 80 um)

	(Contd. of page 3)
· Density at 20 °C:	3.14 g/cm³
· Relative density	Not determined.
· Vapour density	Not applicable.
Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Insoluble
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
Solids content:	100.0 %
· Other information	No further relevant information available.

### 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

### 11 Toxicological Information

- Information on toxicological effects
- · Acute toxicity
- · Primary irritant effect:
- · Skin corrosion/irritation No irritant effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

### 12 Ecological Information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.

(Contd. on page 5)



Page 5/6

## Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CHT™ Ceramic Hydroxyapatite Type II (20 um, 40 um, 80 um)

(Contd. of page 4)

- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information	
· UN-Number · ADG, ADN, IMDG, IATA	Not Reguated
· UN proper shipping name · ADG, ADN, IMDG, IATA	Not Reguated
· Transport hazard class(es)	
· ADG, ADN, IMDG, IATA · Class	Not Reguated
· Packing group · ADG, IMDG, IATA	Not Reguated
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Marpol and IBC Code	l the Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Not Reguated

(Contd. on page 6)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CHT™ Ceramic Hydroxyapatite Type II (20 um, 40 um, 80 um)

(Contd. of page 5)

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Australian Inventory of Chemical Substances

Substance is listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

Substance is not listed.

- · Directive 2012/18/EU
- Named dangerous substances ANNEX I Substance is not listed.
- · National regulations
- · Water hazard class: Generally not hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· \* Data compared to the previous version altered.

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Printing date 08.08.2020 Revision: 07.08.2020

Hazardous according to criteria of Safe Work Australia.

#### 1 Identification

- · Product identifier
- · Trade name: CFT™ Type II (40 um)
- · Article number: 1585200, 1575000, 1575100, 1575500
- · CAS Number: 1306-05-4
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories Pty. Ltd

Level 5, 446 Victoria Road

Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia@bio-rad.com
- Emergency telephone number: 61-2-9037-2994

### 2 Hazard(s) Identification

· Classification of the substance or mixture

Acute Tox. 5 H303 May be harmful if swallowed.

- · Label elements
- · GHS label elements The substance is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms Not Applicable
- · Signal word Warning
- · Hazard statements

H303 May be harmful if swallowed.

· Precautionary statements

P312 Call a POISON CENTER/doctor if you feel unwell.

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

### 3 Composition and Information on Ingredients

- · Chemical characterisation: Substances
- · CAS No. Description: 1306-05-4 Fluoroapatite

(Contd. on page 2)



Page 2/6

## Safety Data Sheet according to WHS Regulations

Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CFT™ Type II (40 um)

· Additional information: For the wording of the listed risk phrases refer to section 16.

(Contd. of page 1)

### **4 First Aid Measures**

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and Storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.

(Contd. on page 3)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CFT™ Type II (40 um)

· Specific end use(s) No further relevant information available.

(Contd. of page 2)

### 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures should be adhered to when handling chemicals.

· Protection of hands: Protective gloves.

9 Physical and Chemical Properties

- · Material of gloves Synthetic gloves
- · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

· Flammability (solid, gaseous)

· Decomposition temperature:

· Explosive properties:

• Explosion limits: Lower:

· Self igniting:

Upper:

· Information on basic physical and ch · General Information	emical properties	
· Appearance:		
Form:	Powder	
Colour:	White	
· Odour:	Odourless	
· Odour threshold:	Not determined.	
· pH-value:	Not applicable.	
Change in condition		
Melting point/freezing point:	undetermined	
Initial boiling point and boiling rang	ge: undetermined	
· Flash point:	Not applicable	
-	Not determined.	

Product is not flammable.

Not determined.

Not determined.

Not determined.

Not determined.

Not determined.

(Contd. on page 4)





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CFT™ Type II (40 um)

	(Contd. of page
Vapour pressure:	Not applicable.
· Density:	Not determined
Relative density	Not determined.
· Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Insoluble
Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
Solids content:	100.0 %
Other information	No further relevant information available.

### 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

### 11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity
- LD/LC50 values that are relevant for classification:

### 1306-05-4 Fluoroapatite

Oral LD50 3,000 mg/kg (rat)

- · Primary irritant effect:
- · Skin corrosion/irritation No irritant effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

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Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CFT™ Type II (40 um)

(Contd. of page 4)

### 12 Ecological Information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · **Mobility in soil** No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information		
· UN-Number · ADG, ADN, IMDG, IATA	Not Reguated	
· UN proper shipping name · ADG, ADN, IMDG, IATA	Not Reguated	
· Transport hazard class(es)		
· ADG, ADN, IMDG, IATA · Class	Not Reguated	
· Packing group · ADG, IMDG, IATA	Not Reguated	
· Environmental hazards: · Marine pollutant:	No	
· Special precautions for user	Not applicable.	
	(Contd. on p	age 6

Contd. on page 6





Printing date 08.08.2020 Revision: 07.08.2020

Trade name: CFT™ Type II (40 um)

(Contd. of page 5)

· Transport in bulk according to Annex II of Marpol and the	
IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Not Reguated

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Australian Inventory of Chemical Substances

Substance is listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

Substance is not listed.

- · Directive 2012/18/EU
- Named dangerous substances ANNEX I Substance is not listed.
- · National regulations
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 5: Acute toxicity - oral - Category 5

· \* Data compared to the previous version altered.

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Printing date 08.08.2020 Revision: 24.06.2020

Hazardous according to criteria of Safe Work Australia.

#### 1 Identification

- · Product identifier
- · Trade name: UNOsphere SUPrA Affinity Chromatography Media
- · Article number: 1560218, 1560219, 1560220, 1560221, 1560222, 10012664, 1560250, 10014556
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories Pty. Ltd Level 5, 446 Victoria Road Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia@bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

### 2 Hazard(s) Identification

· Classification of the substance or mixture

Flam. Liq. 3 H226 Flammable liquid and vapour. Eye Irrit. 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms





GHS02 GHS07

- · Signal word Warning
- · Hazard statements

H226 Flammable liquid and vapour. H319 Causes serious eye irritation.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

Wear protective gloves/protective clothing/eye protection/face protection. P280

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)





Printing date 08.08.2020 Revision: 24.06.2020

Trade name: UNOsphere SUPrA Affinity Chromatography Media

(Contd. of page 1)

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB**: Not applicable.

### 3 Composition and Information on Ingredients

- · Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- Dangerous components:

64-17-5 ethanol

Flam. Liq. 2, H225 Eye Irrit. 2A, H319 10-20%

· Additional information For the wording of the listed hazard phrases refer to section 16.

### 4 First Aid Measures

- · Description of first aid measures
- · General information Immediately remove any clothing soiled by the product.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact

Generally the product does not irritate the skin.

Immediately rinse with water.

- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Accidental Release Measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Wear protective clothing.

· Environmental precautions:

Prevent seepage into sewage system, workpits and cellars.

Dilute with plenty of water.

(Contd. on page 3)





Printing date 08.08.2020 Revision: 24.06.2020

Trade name: UNOsphere SUPrA Affinity Chromatography Media

(Contd. of page 2)

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and Storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

#### 64-17-5 ethanol

WES Long-term value: 1880 mg/m³, 1000 ppm

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

- · Breathing equipment: Not necessary if room is well-ventilated.
- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 4)





Printing date 08.08.2020 Revision: 24.06.2020

Trade name: UNOsphere SUPrA Affinity Chromatography Media

(Contd. of page 3)

· Eye protection: Safety glasses

Tightly sealed goggles.

Information on basic physical and che	mical properties
General Information	
Appearance: Form:	Suspension
Colour:	White
Odour:	Alcohol-like
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/freezing point:	undetermined
Initial boiling point and boiling range	e: 78 °C
Flash point:	23 - 60 °C
Flammability (solid, gaseous)	Not applicable.
Ignition temperature:	425 °C
Decomposition temperature:	Not determined.
Self igniting:	Product is not selfigniting.
Explosive properties:	Not determined.
Explosion limits:	
Lower:	3.5 Vol %
Upper:	15 Vol %
Vapour pressure at 20 °C:	59 hPa
Density:	Not determined
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Partly miscible
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
Solvent content:	
Organic solvents:	17.3 %





Printing date 08.08.2020 Revision: 24.06.2020

Trade name: UNOsphere SUPrA Affinity Chromatography Media

(Contd. of page 4)

Water:	76.2 %	
Solids content:  Other information	6.5 % No further relevant information available.	

### 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

### 11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity
- · LD/LC50 values that are relevant for classification:

#### 64-17-5 ethanol

 Oral
 LD50
 7,060 mg/kg (rat)

 Inhalative
 LC50/4 h
 20,000 mg/l (rat)

- Primary irritant effect:
- · Skin corrosion/irritation No irritant effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.

### 12 Ecological Information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

(Contd. on page 6)





Printing date 08.08.2020 Revision: 24.06.2020

Trade name: UNOsphere SUPrA Affinity Chromatography Media

· Other adverse effects No further relevant information available.

(Contd. of page 5)

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

JN-Number	
ADG, ADN, IMDG, IATA	Not Reguated
IN proper shipping name	
ADG	Not Reguated
	Not Reguated
IDN, IMDG, IATA	Not Reguated
ransport hazard class(es)	
ADG, ADN, IMDG, IATA	
Class	Not Reguated
Packing group	
ADG, IMĎG, İATA	Not Reguated
nvironmental hazards:	
flarine pollutant:	No
Special precautions for user	Not applicable.
ransport in bulk according to Annex II of Ma	rpol and the
BC Code	Not applicable.
ransport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Not Reguated

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Australian Inventory of Chemical Substances

7732-18-5 water

64-17-5 ethanol

(Contd. on page 7)





Printing date 08.08.2020 Revision: 24.06.2020

Trade name: UNOsphere SUPrA Affinity Chromatography Media

(Contd. of page 6)

· Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

· Australia: Priority Existing Chemicals

None of the ingredients is listed.

- · Directive 2012/18/EU
- Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- · National regulations
- · Technical instructions (air):

Class	Share in %
NK	10-20

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2 Flam. Liq. 3: Flammable liquids – Category 3

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

\* Data compared to the previous version altered.

ΑU