

01.09.2020

Kit components

Product code	Description
1665040 1665040EDU	Protein Exp Purification Centrifugation Kit
Components:	
1660407	Ampicillin, lyophilized
1660600	LB Nutrient Agar Powder
1660412	LB Broth, Capsules
9702999	Lysozyme Lyophilized
10020781	BL21(DE3) with pDHFR, lyophilized
10013088	IPTG Solution
1610780	10X PBS (Phosphate Buffer Saline)
10021782	Imidazole Stock Solution
10021397	20% Sterile Glucose
1451083	Sterile Water
1610732	10X Tris/Glycine/SDS Buffer
1610737	2X Laemmli Sample Buffer
1610786	Bio-Safe Coomassie Stain
1610374	Precision Plus Protein Dual Color Standards
1560131	Profinity™ IMAC Nickel Charged Resin
7326221	Micro Bio-Spin [™] 6 or 30 Chromotography Column
247-1	Dihydrofolic Acid Substrate
10021673	NADPH cofactor





Printing date 01.09.2020 Revision: 30.07.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

- · Product identifier
- · Trade name: Ampicillin, lyophilized
- · Article number: 1660407, 1660407EDU, 9702928
- · CAS Number:

69-52-3

· EC number:

200-708-1

· 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 Ptv. 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

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

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



GHS07

- · Signal word Warning
- · Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves / eye protection / face protection.

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Trade name: Ampicillin, lyophilized

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P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

to do. Continue rinsing.

P405 Store locked up.

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

- · 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:

69-52-3 sodium [2S-[2alpha,5alpha,6ß(S*)]]-6-(aminophenylacetamido)-3,3-dimethyl-7-oxo-4-thia-1azabicyclo[3.2.0]heptane-2-carboxylate

- · Identification number(s):
- · EC number: 200-708-1
- · Additional information: For the wording of the listed risk 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

Immediately wash with water and soap and rinse thoroughly. Immediately rinse with water.

- · 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.



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Safety Data Sheet according to WHS Regulations

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Trade name: Ampicillin, lyophilized

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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:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

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.

Ensure good ventilation/exhaustion at the workplace.

- · 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: 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

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:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves

(Contd. on page 4)





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Trade name: Ampicillin, lyophilized

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· 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.

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Information on basic physical and cher	mical properties
General Information	
Appearance: Form:	Crystalline
Colour:	Light yellow
Odour:	Odourless
Odour threshold:	Not determined.
pH-value:	Not applicable.
Change in condition	
Melting point/freezing point:	240 °C
Initial boiling point and boiling range:	
Flash point:	Not applicable
Flammability (solid, gaseous)	Product is not flammable.
Decomposition temperature:	Not determined.
Self igniting:	Not determined.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not applicable.
Density:	Not determined
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Soluble
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.

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Safety Data Sheet according to WHS Regulations

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Trade name: Ampicillin, lyophilized

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· 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 Irritant to skin and mucous membranes.
- · Serious eye damage/irritation 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: 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.

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Trade name: Ampicillin, lyophilized

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

14 T	rans	port	info	rmat	ion

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- 1	u	W-	IVL	,,,,	UCI

· 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:

· Special precautions for user Not applicable.

· Transport in bulk according to Annex II of Marpol and the

IBC Code Not applicable.

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

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Trade name: Ampicillin, lyophilized

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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

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

* Data compared to the previous version altered.





Printing date 01.09.2020 Revision: 30.07.2020

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

1 Identification

- · Product identifier
- · Trade name: LB Nutrient Agar Powder
- · Article number: 1660600, 1660403, 1660403EDU, 1660600EDU, 9702926, 1660472, 1660472EDU, 9704355, 10040672
- · 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:	
9002-18-0	Agar	35-50%
73049-73-7	Tryptone	20-35%
7647-14-5	sodium chloride	20-35%
8013-01-2	Yeast Extract	10-20%
	(Contd	on page 2)

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Trade name: LB Nutrient Agar Powder

(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 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

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 01.09.2020 Revision: 30.07.2020

Trade name: LB Nutrient Agar Powder

(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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the

- · 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

Information on basic physical and o	chemical properties	
General Information	moment properties	
Appearance:		
Form:	Solid.	
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 ra	nge: undetermined	
Flash point:	Not applicable	
Flammability (solid, gaseous)	Not determined.	
Decomposition temperature:	Not determined.	
Self igniting:	Product is not selfigniting.	
Explosive properties:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapour pressure:	Not applicable.	
Density:	Not determined	





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Trade name: LB Nutrient Agar Powder

	(Contd. of page 3
 Relative density Vapour density Evaporation rate 	Not determined. Not applicable. Not applicable.
· Solubility in / Miscibility with Water:	Fully miscible
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: dynamic: kinematic:	Not applicable. Not applicable.
· Solvent content:	
Solids content: · Other information	100.0 % 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.

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.

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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 30.07.2020

Trade name: LB Nutrient Agar Powder

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- 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

Can be disposed of with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

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: Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

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 IBC Code	Marpol and the Not applicable.	
· UN "Model Regulation":	Not Reguated	
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Trade name: LB Nutrient Agar Powder

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15 Regulatory information

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

All ingredients are listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

77-86-1 Tris(hydroxymethyl)aminomethane

S4

- · 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

ELINCS: European List of Notified 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.

ΑU





Printing date 01.09.2020 Revision: 01.10.2019

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

1 Identification

- · Product identifier
- · Trade name: LB Broth, Capsules
- · Article number: 1660412, 1660412EDU
- · 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: Not applicable.
- · 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.

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Trade name: LB Broth, Capsules

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- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · 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

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.

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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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Trade name: LB Broth, Capsules

(Contd. of page 2)

- · 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

9 Physical and Chemical Propertion	es es es estados estad
· Information on basic physical and che	mical properties
General Information	
· Appearance:	
Form:	Tablets
Colour:	Light brown
· Odour:	Sweetish
· Odour threshold:	Not determined.
· pH-value:	Not applicable.
Change in condition	
Melting point/freezing point:	undetermined
Initial boiling point and boiling range	: undetermined
· Flash point:	Not applicable
· Flammability (solid, gaseous)	Not determined.
· Decomposition temperature:	Not determined.
· Self igniting:	Product is not selfigniting.
· Explosive properties:	Not determined.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not applicable.
· Density:	Not determined
· Relative density	Not determined.
· Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Fully miscible
· Partition coefficient: n-octanol/water:	Not determined.
	(Contd. on page

(Contd. on page 4)





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Trade name: LB Broth, Capsules

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· Viscosity:

dynamic: Not applicable. kinematic: Not applicable.

· Solvent content:

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.

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.

(Contd. on page 5)





Printing date 01.09.2020 Revision: 01.10.2019

Trade name: LB Broth, Capsules

· Other adverse effects No further relevant information available.

(Contd. of page 4)

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.

4 Transport information		
· 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	
Special precautions for user	Not applicable.	
· Transport in bulk according to Annex II o	of Marpol and the	
IBC Code	Not applicable.	
· 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

All ingredients are listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

(Contd. on page 6)





Printing date 01.09.2020 Revision: 01.10.2019

Trade name: LB Broth, Capsules

(Contd. of page 5)

· 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
- · 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

ELINCS: European List of Notified 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.

AU



Page 1/6

Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 13.08.2020

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

1 Identification

· Product identifier

· Trade name: Lysozyme Lyophilized

· Article number: 9702999

• **CAS Number:** 9001-63-2

• **EC number:** 232-620-4

 \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:

9001-63-2 Lysozyme

- · Identification number(s):
- · EC number: 232-620-4

(Contd. on page 2)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 13.08.2020

Trade name: Lysozyme Lyophilized

· 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: 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 01.09.2020 Revision: 13.08.2020

Trade name: Lysozyme Lyophilized

· 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.
- · 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 Prope	rties
Information on basic physical and of General Information	chemical properties
· Appearance: Form:	Crystallina naudar
Colour:	Crystalline powder Whitish
· Odour:	Odourless
· Odour threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition Melting point/freezing point: Initial boiling point and boiling ra	undetermined 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.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.

(Contd. on page 4)





Printing date 01.09.2020 Revision: 13.08.2020

Trade name: Lysozyme Lyophilized

		(Contd. of page
· Vapour pressure:	Not applicable.	
Density: Relative density Vapour density Evaporation rate	Not determined Not determined. Not applicable. Not applicable.	
Solubility in / Miscibility with Water:	Fully miscible	
Partition coefficient: n-octanol/water:	Not determined.	
Viscosity: dynamic: kinematic:	Not applicable. Not applicable.	
Solids content: Other information	100.0 % 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 01.09.2020 Revision: 13.08.2020

Trade name: Lysozyme Lyophilized

(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.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

4 Transport information	
· UN-Number · ADG, ADN, IMDG, IATA	Not Reguated
	Not Neguated
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
- 01033	Not Negation
· 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 Marpo	ol and the
IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
	(Contd. on page





Printing date 01.09.2020 Revision: 13.08.2020

Trade name: Lysozyme Lyophilized

(Contd. of page 5)

· 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.

· Australia: Priority Existing Chemicals

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.

ΑL





Printing date 01.09.2020 Revision: 11.08.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

- · Product identifier
- · Trade name: BL21(DE3) with pDHFR, lyophilized
- · Article number: 10020781
- · 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. 3 H301 Toxic if swallowed.

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



- · Signal word Danger
- · Hazard-determining components of labelling:

E. Coli BL21 (DE3) Cells

· Hazard statements

H301 Toxic if swallowed.

· Precautionary statements

P264 Wash thoroughly after handling.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P330 Rinse mouth. P405 Store locked up.

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

(Contd. on page 2)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 11.08.2020

Trade name: BL21(DE3) with pDHFR, lyophilized

(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: Substances
- · CAS No. Description: E. Coli BL21 (DE3) Cells
- · Additional information: For the wording of the listed risk phrases refer to section 16.

4 First Aid Measures

- · Description of first aid measures
- · General information

Immediately remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

- · After inhalation In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact

Generally the product does not irritate the skin.

Immediately wash with water and soap and rinse thoroughly.

- · After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing

Do not induce vomiting; call for medical help immediately.

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: Dispose contaminated material as waste according to item 13.
- · Reference to other sections

See Section 7 for information on safe handling

(Contd. on page 3)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 11.08.2020

Trade name: BL21(DE3) with pDHFR, lyophilized

(Contd. of page 2)

See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and Storage

- · Handling
- · Precautions for safe handling Thorough dedusting.
- · 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: 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

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

- · 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: Solid.
Colour: Light yellow
Odour: Odourless
Odour threshold: Not determined.

· pH-value: Not applicable.

(Contd. on page 4)





Printing date 01.09.2020 Revision: 11.08.2020

Trade name: BL21(DE3) with pDHFR, lyophilized

	(Contd. of page
Change in condition Melting point/freezing point: Initial boiling point and boiling range	undetermined : 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.
Explosion limits: Lower: Upper:	Not determined. Not determined.
Vapour pressure:	Not applicable.
Density: Relative density Vapour density Evaporation rate	Not determined Not determined. Not applicable. Not applicable.
Solubility in / Miscibility with Water:	Fully miscible
Partition coefficient: n-octanol/water:	Not determined.
Viscosity: dynamic: kinematic:	Not applicable. Not applicable.
Solids content: Other information	100.0 % 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

AU



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 11.08.2020

Trade name: BL21(DE3) with pDHFR, lyophilized

(Contd. of page 4)

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.

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.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number

· **ADG** 3287

· ADN, IMDG, IATA Not Reguated

· UN proper shipping name

· ADN, IMDG, IATA Not Reguated

(Contd. on page 6)





Printing date 01.09.2020 Revision: 11.08.2020

Trade name: BL21(DE3) with pDHFR, lyophilized

	(Contd. of page
· Transport hazard class(es)	
· ADG	
· Class	6.1 Toxic substances.
· ADN/R Class:	Not Reguated
· Packing group	
ADG	III
· IMDG, IATA	Not Reguated
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Toxic substances.
· Transport in bulk according to Annex II of I	Marpol and the
IBC Code	Not applicable.
· Transport/Additional information:	
· ADG	
· Limited quantities (LQ)	LQ7
· Transport category	2
Tunnel restriction code	E

15 Regulatory information

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

Substance is not listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

Substance is not listed.

· Australia: Priority Existing Chemicals

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.

(Contd. on page 7)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 11.08.2020

Trade name: BL21(DE3) with pDHFR, lyophilized

(Contd. of page 6)

· 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)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Acute Tox. 3: Acute toxicity - oral – Category 3

* Data compared to the previous version altered.

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Printing date 01.09.2020 Revision: 05.08.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

· Product identifier

· Trade name: <u>IPTG Solution</u> · Article number: 10013088

· 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. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 5 H333 May be harmful if inhaled.

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



GHS07

- · Signal word Warning
- Hazard-determining components of labelling:

isopropyl-ß-D-thiogalactopyranoside

· Hazard statements

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H333 May be harmful if inhaled.

· Precautionary statements

P280 Wear protective gloves / protective clothing.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P321 Specific treatment (see on this label).

(Contd. on page 2)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 05.08.2020

Trade name: IPTG Solution

(Contd. of page 1)

P330 Rinse mouth.

P362+P364 Take off contaminated clothing and wash it before reuse.

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

- · 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:

367-93-1 isopropyl-ß-D-thiogalactopyranoside Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332

20-35%

· 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.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact

Generally the product does not irritate the skin.

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing

Call for a doctor immediately.

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.

AU



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 05.08.2020

Trade name: IPTG Solution

(Contd. of page 2)

6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions:

Dilute with plenty of water.

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.

· 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.

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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · 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 and skin.

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

(Contd. on page 4)





Revision: 05.08.2020 Printing date 01.09.2020

Trade name: IPTG Solution

(Contd. of page 3)

• 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 Properti	es
· Information on basic physical and che	emical properties
· General Information	properties.
· Appearance:	
Form:	Fluid
Colour:	Colourless
· Odour:	Odourless
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/freezing point:	undetermined
Initial boiling point and boiling range	e: undetermined
· Flash point:	Not applicable
,	Not determined.
· Flammability (solid, gaseous)	Not applicable.
· Decomposition temperature:	Not determined.
· Self igniting:	Product is not selfigniting.
· Explosive properties:	Not determined.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density:	Not determined
· 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:	
Water:	76.2 %
Solids content:	23.8 %
	(Contd. on page

(Contd. on page 5)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 05.08.2020

Trade name: IPTG Solution

(Contd. of page 4)

· 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: Harmful

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.

(Contd. on page 6)





Printing date 01.09.2020 Revision: 05.08.2020

Trade name: IPTG Solution

(Contd. of page 5)

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
UN proper shipping name	
ADG	Not Reguated
ADN, IMDG, IATA	Not Reguated Not Reguated
	Tvot rioguatou
Transport hazard class(es)	
ADG, ADN, IMDG, IATA	Mat Daniela I
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	pol 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

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.

(Contd. on page 7)





Printing date 01.09.2020 Revision: 05.08.2020

Trade name: IPTG Solution

(Contd. of page 6)

- · 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.

· Relevant phrases

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

- · 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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - oral - Category 4

Acute Tox. 5: Acute toxicity - inhalation – Category 5

* Data compared to the previous version altered.

AU





Printing date 01.09.2020 Revision: 30.07.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

- · Product identifier
- · Trade name: 10X PBS (Phosphate Buffer Saline)
- · Article number: 1610780, 9705962, 1662403, 1662403EDU, 9703380, 1610780EDU, 1610780XTU
- · 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 H333 May be harmful if inhaled.

- · Label elements
- · GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms Not Applicable
- · Signal word Warning
- Hazard-determining components of labelling:

Monosodium phosphate

· Hazard statements

H333 May be harmful if inhaled.

· Precautionary statements

P304+P312 IF INHALED: 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: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Not applicable.

(Contd. on page 2)





Printing date 01.09.2020 Revision: 30.07.2020

Trade name: 10X PBS (Phosphate Buffer Saline)

(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: 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.

(Contd. on page 3)





Printing date 01.09.2020 Revision: 30.07.2020

Trade name: 10X PBS (Phosphate Buffer Saline)

(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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

· Eye protection: Safety glasses

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UPN		Chemi	-	
2 1 11			Gail	GILIGO

Information on basic physical and cl	nemical properties	
General Information		
· Appearance:		
Form:	Fluid	
Colour:	Colourless	
Odour:	Odourless	
· Odour threshold:	Not determined.	
· pH-value at 20 °C:	7.4	
 Change in condition Melting point/freezing point: Initial boiling point and boiling rang 	undetermined ge: undetermined	
· Flash point:	Not applicable Not determined.	
· Flammability (solid, gaseous)	Not applicable.	
· Decomposition temperature:	Not determined.	
· Self igniting:	Product is not selfigniting.	
· Explosive properties:	Not determined.	
· Explosion limits: Lower:	Not determined.	
		(Contd. on page 4)

(Contd. on page 4)





Printing date 01.09.2020 Revision: 30.07.2020

Trade name: 10X PBS (Phosphate Buffer Saline)

	(Contd. of page	3)
Upper:	Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
· Density:	Not determined	
· 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:		
Water:	90.1 %	
Solids content:	9.9 %	
· 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.

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 01.09.2020 Revision: 30.07.2020

Trade name: 10X PBS (Phosphate Buffer Saline)

(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.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number	N (B
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
<u> </u>	Not Nogacioa
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of Mar	pol and the
IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.





Printing date 01.09.2020 Revision: 30.07.2020

Trade name: 10X PBS (Phosphate Buffer Saline)

(Contd. of page 5)

· 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

All ingredients are listed.

· 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
- · 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

ELINCS: European List of Notified Chemical Substances

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

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

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

* Data compared to the previous version altered.

ΑU





Printing date 01.09.2020 Revision: 11.08.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

- · Product identifier
- · Trade name: Imidazole Stock Solution
- · Article number: 10021782
- · 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

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation. Repr. 1B H360D May damage the unborn child.

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





GHS07 GHS08

- · Signal word Danger
- · Hazard-determining components of labelling: imidazole
- · Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H360D May damage the unborn child.

· Precautionary statements

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

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

(Contd. on page 2)



Printing date 01.09.2020 Revision: 11.08.2020

Trade name: Imidazole Stock Solution

(Contd. of page 1)

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P308+P313 IF exposed or concerned: Get medical advice/attention. P332+P313 If skin irritation occurs: Get medical advice/attention.

P405 Store locked up.

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

· 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:

288-32-4 imidazole

Repr. 1B, H360D Skin Corr. 1C, H314 1-2.5%

Acute Tox. 4, H302

· 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 wash with water and soap and rinse thoroughly.

Immediately rinse with water.

- · 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.

(Contd. on page 3)



Page 3/7

Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 11.08.2020

Trade name: Imidazole Stock Solution

(Contd. of page 2)

- · 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).

Dispose contaminated material as waste according to item 13.

· 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.

Open and handle receptacle with care.

- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · 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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · 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.

Store protective clothing separately.

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.

(Contd. on page 4)





Printing date 01.09.2020 Revision: 11.08.2020

Trade name: Imidazole Stock Solution

(Contd. of page 3)

· **Eye protection:** Safety glasses Tightly sealed goggles.

9 Physical and Chemical Propertion	es
· Information on basic physical and che · General Information	emical properties
· Appearance:	Fluid
Form: Colour:	Colourless
· Odour:	Odourless
· Odour .	Not determined.
· pH-value at 20 °C:	8
•	0
Change in condition	
Melting point/freezing point:	0 ℃
Initial boiling point and boiling range	e: undetermined
· Flash point:	Not applicable
,	Not determined.
· Flammability (solid, gaseous)	Not applicable.
· Decomposition temperature:	Not determined.
· Self igniting:	Product is not selfigniting.
· Explosive properties:	Not determined.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density:	Not determined
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
<u> </u>	The determined.
Solubility in / Miscibility with	
Water:	Fully miscible
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
· Solvent content:	
Water:	96.0 %
Solids content:	100.0 %
	(Contd. on page 5)

(Contd. on page 5)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 11.08.2020

Trade name: Imidazole Stock Solution

(Contd. of page 4)

· 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 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

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Repr. 1B

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.

ΑU





Printing date 01.09.2020 Revision: 11.08.2020

Trade name: Imidazole Stock Solution

(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.

14 Transport information	
· UN-Number · ADG, ADN, IMDG, IATA	Not Reguated
UN proper shipping nameADGADN, 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 I IBC Code	Marpol and the Not applicable.
· 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

All ingredients are listed.

· 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.

(Contd. on page 7)





Printing date 01.09.2020 Revision: 11.08.2020

Trade name: Imidazole Stock Solution

(Contd. of page 6)

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

· Relevant phrases

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H360D May damage the unborn child.

- · 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-

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - oral - Category 4

Skin Corr. 1C: Skin corrosion/irritation - Category 1C

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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

Repr. 1B: Reproductive toxicity - Category 1B

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^{· *} Data compared to the previous version altered.



Page 1/6

Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 14.08.2020

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

1 Identification

- · Product identifier
- · Trade name: 20% Sterile Glucose
- · Article number: 10021397, 10021666
- · 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: Not applicable.
- · 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.

(Contd. on page 2)



Page 2/6

Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 14.08.2020

Trade name: 20% Sterile Glucose

(Contd. of page 1)

- · 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.

8 Exposure controls and personal protection

Additional information about design of technical systems: No further data; see item 7.

(Contd. on page 3)





Printing date 01.09.2020 Revision: 14.08.2020

Trade name: 20% Sterile Glucose

(Contd. of page 2)

- · Control parameters
- Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · 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 Propertie	es
 Information on basic physical and cheme General Information Appearance: Form: 	Liquid
Colour: · Odour: · Odour threshold:	Colourless Odourless 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.
· Decomposition temperature:	Not determined.
· Self igniting:	Product is not selfigniting.
· Explosive properties:	Not determined.
· Explosion limits: Lower: Upper:	Not determined. Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density: · Relative density	Not determined Not determined.
	(Contd. on page 4)

(Contd. on page 4)





Printing date 01.09.2020 Revision: 14.08.2020

Trade name: 20% Sterile Glucose

	(Contd. of page	3)
· Vapour density · Evaporation rate	Not determined. Not determined.	
· Solubility in / Miscibility with Water:	Fully miscible	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity: dynamic: kinematic:	Not determined. Not determined.	
· Solvent content: Water:	80.0 %	
Solids content: · Other information	20.0 % 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.

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.

(Contd. on page 5)



Page 5/6

Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 14.08.2020

Trade name: 20% Sterile Glucose

(Contd. of page 4)

- 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.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number ADG, ADN, IMDG, IATA	Not Reguated	
ADG, ADN, IMDG, IATA	пот кедиатей	
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, İATA	Not Reguated	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex II of I	Marpol and the	
IBC Code	Not applicable.	
UN "Model Regulation":	Not Reguated	

(Contd. on page 6)





Printing date 01.09.2020 Revision: 14.08.2020

Trade name: 20% Sterile Glucose

(Contd. of page 5)

15 Regulatory information

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

All ingredients are listed.

· 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
- · 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

ELINCS: European List of Notified 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 01.09.2020 Revision: 21.07.2020

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

1 Identification

- · Product identifier
- · Trade name: Sterile Water
- · Article number: 1451083, 10005797, 10013899, 9703463, 10032250, 10032986, 10032249
- **CAS Number:** 7732-18-5 **EC number:**
- **EC number** 231-791-2
- · 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 cumplion of the sefety data sheet
- 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:

7732-18-5 water

- · Identification number(s):
- · EC number: 231-791-2

(Contd. on page 2)





Printing date 01.09.2020 Revision: 21.07.2020

Trade name: Sterile Water

(Contd. of page 1)

· Additional 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

Water

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.

(Contd. on page 3)





Printing date 01.09.2020 Revision: 21.07.2020

Trade name: Sterile Water

(Contd. of page 2)

- · Further information about storage conditions: None.
- · 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.

- · 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

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· Information on basic physical and chemical properties						
· General Information						
· Appearance:						
Form:	Fluid					
Colour:	Colourless					
Odour:	Odourless					
· Odour threshold:	Not determined.					
· pH-value:	Not determined.					
· Change in condition Melting point/freezing point: Initial boiling point and boiling rang	0 °C ge: 100 °C					
· Flash point:	Not applicable Not determined.					
· Flammability (solid, gaseous)	Not applicable.					
· Decomposition temperature:	Not determined.					
· Self igniting:	Not determined.					
· Explosive properties:	Not determined.					
· Explosion limits: Lower:	Not determined.					

(Contd. on page 4)





Printing date 01.09.2020 Revision: 21.07.2020

Trade name: Sterile Water

	(Contd. of page	ge 3
Upper:	Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
· Density at 20 °C:	1 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 at 20 °C:	0.952 mPas	
kinematic:	Not determined.	
Water:	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 01.09.2020 Revision: 21.07.2020

Trade name: Sterile Water

(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: Dispose of packaging according to regulations on the disposal of packagings.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information	
· 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
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Mar	pol and the Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
	(Contd. on page 6





Printing date 01.09.2020 Revision: 21.07.2020

Trade name: Sterile Water

(Contd. of page 5)

· 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.

· Australia: Priority Existing Chemicals

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 01.09.2020 Revision: 24.07.2020

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

1 Identification

- · Product identifier
- Trade name: 10X Tris/Glycine/SDS Buffer
- · Article number: 1610732, 9701906, 1610772, 1610732EDU, 1610772EDU, 10021723
- 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: Not applicable.
- · 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.

(Contd. on page 2)



Page 2/7

Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 24.07.2020

Trade name: 10X Tris/Glycine/SDS Buffer

(Contd. of page 1)

- · 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.

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).

· 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.

(Contd. on page 3)





Printing date 01.09.2020 Revision: 24.07.2020

Trade name: 10X Tris/Glycine/SDS Buffer

(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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls

Lower:

Upper:

- · 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

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ysical and		• 	

9 Physical and Chemical Properties						
· Information on basic physical and chemical properties · General Information						
· Appearance:						
Form:	Fluid					
Colour:	Light yellow					
· Odour:	Odourless					
· Odour threshold:	Not determined.					
· pH-value at 20 °C:	8.3					
· Change in condition Melting point/freezing point: Initial boiling point and boiling ra	undetermined ange: 100 °C					
· Flash point:	Not applicable Not determined.					
· Flammability (solid, gaseous)	Not applicable.					
· Decomposition temperature:	Not determined.					
· Self igniting:	Product is not selfigniting.					
· Explosive properties:	Not determined.					
· Explosion limits:						

Not determined.

Not determined.

(Contd. on page 4)





Printing date 01.09.2020 Revision: 24.07.2020

Trade name: 10X Tris/Glycine/SDS Buffer

	(Contd. of page 3
· Vapour pressure at 20 °C:	23 hPa
 Density at 20 °C: Relative density Vapour density Evaporation rate 	0.98915 g/cm³ Not determined. Not determined. Not determined.
· Solubility in / Miscibility with Water:	Fully miscible
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: dynamic: kinematic:	Not determined. Not determined.
· Solvent content: Water:	81.4 %
Solids content: · Other information	18.6 % 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,	/LC	5 50	va	lues that are	relevant i	for c	lassification:	
			-	-					ī

56-40-6 glycine

Oral LD50 7,930 mg/kg (rat)
Dermal LD50 5,200 mg/kg (rat)

77-86-1 Tris(hydroxymethyl)aminomethane

Oral LD50 5,900 mg/kg (Rat)
Dermal LD50 >5,000 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.

(Contd. on page 5)





Printing date 01.09.2020 Revision: 24.07.2020

Trade name: 10X Tris/Glycine/SDS Buffer

(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:

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.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information	
· UN-Number · ADG, ADN, IMDG, IATA	Not Reguated
· UN proper shipping name	Not Poguated
· ADG	Not Reguated Not Reguated
· ADN, IMDG, IATA	Not Reguated
· Transport hazard class(es)	
· ADG, ADN, IMDG, IATA	
· Class	Not Reguated

(Contd. on page 6)





Printing date 01.09.2020 Revision: 24.07.2020

Trade name: 10X Tris/Glycine/SDS Buffer

	(Contd. of page 5)
· 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 Marpo IBC Code	ol 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

All ingredients are listed.

- · Standard for the Uniform Scheduling of Medicines and Poisons
 - 77-86-1 Tris(hydroxymethyl)aminomethane

S4

· 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
- · 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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

(Contd. on page 7)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 24.07.2020

Trade name: 10X Tris/Glycine/SDS Buffer

(Contd. of page 6)

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

· * Data compared to the previous version altered.





Printing date 01.09.2020 Revision: 13.02.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

- · Product identifier
- · Trade name: 2X Laemmli Sample Buffer
- · Article number: 1610737, 1610737EDU, 1610737XTU
- · 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 H333 May be harmful if inhaled. Skin Corr. 3 H316 Causes mild skin irritation.

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

H333 May be harmful if inhaled.

H316 Causes mild skin irritation.

· Precautionary statements

P304+P312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.

P332+P313 If skin irritation occurs: Get medical advice/attention.

- · 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.

(Contd. on page 2)

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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 13.02.2020

Trade name: 2X Laemmli Sample Buffer

(Contd. of page 1)

· Dangerou	us components:		
56-81-5	glycerol	Acute Tox. 5, H303; Acute Tox. 5, H333	20-35%
151-21-3	sodium dodecyl sulphate	Acute Tox. 3, H311 Eye Dam. 1, H318 Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335	1-2.5%

· 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:

Dilute with plenty of water.

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).

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.

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(Contd. on page 3)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 13.02.2020

Trade name: 2X Laemmli Sample Buffer

(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: None.
- · 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:

56-81-5 glycerol

WES Long-term value: 10 mg/m3

- · 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: Liquid
Colour: Light blue
Odour: Odourless
Odour threshold: Not determined.

• **pH-value at 20 °C:** 6.8

(Contd. on page 4)





Printing date 01.09.2020 Revision: 13.02.2020

Trade name: 2X Laemmli Sample Buffer

	(Contd. of page
· Change in condition Melting point/freezing point: Initial boiling point and boiling range	undetermined :: 100 °C
· Flash point:	> 100 °C
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	400 °C
· Decomposition temperature:	Not determined.
· Self igniting:	Product is not selfigniting.
· Explosive properties:	Not determined.
· Explosion limits: Lower: Upper:	0.9 Vol % Not determined.
· Vapour pressure at 20 °C:	23 hPa
 Density: Relative density Vapour density Evaporation rate 	Not determined Not determined. Not determined. Not determined. Not determined.
· Solubility in / Miscibility with Water:	Fully miscible
Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: dynamic: kinematic:	Not determined. Not determined.
· Solvent content: Organic solvents: Water:	26.3 % 70.8 %
Solids content: Other information	2.9 % 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.

(Contd. on page 5)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 13.02.2020

Trade name: 2X Laemmli Sample Buffer

· Hazardous decomposition products: No dangerous decomposition products known

(Contd. of page 4)

11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity
- · LD/LC50 values that are relevant for classification: 56-81-5 glycerol 4,090 mg/kg (mouse) Oral LD50 12,600 mg/kg (rat) Dermal LD50 10,000 mg/kg (Rabbit) Inhalative LC50/4 h >30 mg/l (Rat) 151-21-3 sodium dodecyl sulphate Oral LD50 1,288 mg/kg (rat) LD50 580 mg/kg (Rabbit) Dermal
 - · 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:

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.

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Printing date 01.09.2020 Revision: 13.02.2020

Trade name: 2X Laemmli Sample Buffer

(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.

UN-Number ADG, ADN, IMDG, IATA	Not Reguated
JN 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
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of Mai BC 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

All ingredients are listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

77-86-1 Tris(hydroxymethyl)aminomethane

(Contd. on page 7)

S4





Printing date 01.09.2020 Revision: 13.02.2020

Trade name: 2X Laemmli Sample Buffer

(Contd. of page 6)

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	20-35

- · 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

H302 Harmful if swallowed.

H303 May be harmful if swallowed.

H311 Toxic in contact with skin.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H333 May be harmful if inhaled.

H335 May cause respiratory 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-

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

Acute Tox. 4: Acute toxicity - oral - Category 4

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

Acute Tox. 3: Acute toxicity - dermal - Category 3 Skin Irrit. 2: Skin corrosion/irritation – Category 2

Skin Corr. 3: Skin corrosion/irritation - Category 3 Eye Dam. 1: Serious eye damage/eye irritation - Category 1

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

* Data compared to the previous version altered.

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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 12.06.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

- · Product identifier
- · Trade name: Bio-Safe Coomassie Stain
- · Article number: 1610786, 1610787, 1610786S, 1610787EDU, 9704607, 4307131, 4307045, 1610786EDU
- · 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 H333 May be harmful if inhaled. Skin Corr. 3 H316 Causes mild skin irritation.

- · Label elements
- · GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms Not Applicable
- · Signal word Warning
- Hazard-determining components of labelling:

methanol

· Hazard statements

H333 May be harmful if inhaled.

H316 Causes mild skin irritation.

· Precautionary statements

P304+P312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.

P332+P313 If skin irritation occurs: Get medical advice/attention.

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

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(Contd. on page 2)



Page 2/7

Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 12.06.2020

Trade name: Bio-Safe Coomassie Stain

(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:		
7664-38-2 phosphoric acid	Skin Corr. 1B, H314	2.5-5%
67-56-1 methanol	Flam. Liq. 2, H225 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT SE 1, H370	0.1-1%

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:

Dilute with plenty of water.

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).

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.

(Contd. on page 3)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 12.06.2020

Trade name: Bio-Safe Coomassie Stain

See Section 13 for disposal information.

(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: None.
- · 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:

7664-38-2 phosphoric acid

WES Short-term value: 3 mg/m³
Long-term value: 1 mg/m³

67-56-1 methanol

WES Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm

Sk

- · 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

(Contd. on page 4)

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Printing date 01.09.2020 Revision: 12.06.2020

Trade name: Bio-Safe Coomassie Stain

(Contd. of page 3)

Information on basic physical and che	mical properties
General Information	mical properties
Appearance:	
Form:	Liquid
Colour:	Blue
Odour:	Acrid
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/freezing point:	undetermined
Initial boiling point and boiling range	: 100 ℃
Flash point:	Not applicable
Flammability (solid, gaseous)	Not applicable.
Decomposition temperature:	Not determined.
Self igniting:	Product is not selfigniting.
Explosive properties:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density:	Not determined
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:	1.1 %
Water:	93.9 %
Solids content:	5.0 %
Other information	No further relevant information available.



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 12.06.2020

Trade name: Bio-Safe Coomassie Stain

(Contd. of page 4)

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:

67-56-1 methanol

LD50 5,628 mg/kg (rat) Oral Dermal LD50 20,000 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.

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.

(Contd. on page 6)





Printing date 01.09.2020 Revision: 12.06.2020

Trade name: Bio-Safe Coomassie Stain

(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.

UN-Number	
ADG, ADN, IMDG, IATA	Not Reguated
JN proper shipping name	
ADG	Not Reguated
	Not Reguated
ADN, IMDG, IATA	Not Reguated
Fransport hazard class(es)	
ADG, ADN, IMDG, IATA	
Class	Not Reguated
Packing group	
ADG, IMĎG, İATA	Not Reguated
Environmental 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.
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

All ingredients are listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

 7664-38-2
 phosphoric acid
 S5, S6

 67-56-1
 methanol
 S5, S6

(Contd. on page 7)





Printing date 01.09.2020 Revision: 12.06.2020

Trade name: Bio-Safe Coomassie Stain

(Contd. of page 6)

· 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 %
1	0.1-1
NK	0.01-0.1

- · 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.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

H370 Causes damage to organs.

- 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

Acute Tox. 3: Acute toxicity - oral - Category 3

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

Skin Corr. 1B: Skin corrosion/irritation - Category 1B

Skin Corr. 3: Skin corrosion/irritation - Category 3

STOT SE 1: Specific target organ toxicity (single exposure) - Category 1

* * Data compared to the previous version altered.





Printing date 01.09.2020 Revision: 24.06.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

- · Product identifier
- · Trade name: Precision Plus Protein Dual Color Standards
- · Article number: 1610374, 1610374S, 1610394, 10022171, 1610374EDU, 4307147, 1610374TGX
- · 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 H333 May be harmful if inhaled. Skin Corr. 3 H316 Causes mild skin irritation. 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



GHS07

- · Signal word Warning
- · Hazard statements

H333 May be harmful if inhaled. H316 Causes mild skin irritation. H319 Causes serious eye irritation.

· Precautionary statements

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

P304+P312 IF INHÁLED: Call a POISÓN CENTER/doctor if you feel unwell.

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

to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

(Contd. on page 2)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 24.06.2020

Trade name: Precision Plus Protein Dual Color Standards

(Contd. of page 1)

P337+P313

If eye irritation persists: Get medical advice/attention.

- · 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:			
56-81-5 glycerol	Acute Tox. 5, H303; Acute Tox. 5, H333	20-35%	
151-21-3 sodium dodecyl sulphate	Acute Tox. 3, H311 Eye Dam. 1, H318 Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335	1-2.5%	

· 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:

Dilute with plenty of water.

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

(Contd. on page 3)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 24.06.2020

Trade name: Precision Plus Protein Dual Color Standards

(Contd. of page 2)

· 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.

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:

56-81-5 glycerol

WES Long-term value: 10 mg/m3

- · 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

(Contd. on page 4)

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Printing date 01.09.2020 Revision: 24.06.2020

Trade name: Precision Plus Protein Dual Color Standards

(Contd. of page 3)

Physical and Chemical Properties		
Information on basic physical and che General Information Appearance:	mical properties	
Form:	Liquid	
Colour:	Blue	
· Odour:	Rotten	
· Odour threshold:	Not determined.	
· pH-value at 20 °C:	6.8	
· Change in condition Melting point/freezing point: Initial boiling point and boiling range	undetermined : 100 °C	
· Flash point:	> 100 °C	
Flammability (solid, gaseous)	Not applicable.	
Ignition temperature:	400 °C	
Decomposition temperature:	Not determined.	
Self igniting:	Product is not selfigniting.	
Explosive properties:	Not determined.	
· Explosion limits:		
Lower:	0.9 Vol %	
Upper:	Not determined.	
Vapour pressure at 20 °C:	23 hPa	
· Density:	Not determined	
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:	30.0 %	
Water:	66.3 %	
Solids content:	3.7 %	
· Other information	No further relevant information available.	





Printing date 01.09.2020 Revision: 24.06.2020

Trade name: Precision Plus Protein Dual Color Standards

(Contd. of page 4)

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	· LD/LC50 values that are relevant for classification:		
56-81-5 g	lycerol		
Oral	LD50	4,090 mg/kg (mouse)	
		12,600 mg/kg (rat)	
Dermal	LD50	10,000 mg/kg (Rabbit)	
Inhalative	LC50/4 h	>30 mg/l (Rat)	
151-21-3	151-21-3 sodium dodecyl sulphate		
Oral	LD50	1,288 mg/kg (rat)	
Dermal	LD50	580 mg/kg (Rabbit)	

- · 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:

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.

(Contd. on page 6)





Printing date 01.09.2020 Revision: 24.06.2020

Trade name: Precision Plus Protein Dual Color Standards

(Contd. of page 5)

- · 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.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 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	riot rioguatou
· Class · Packing group	Not Reguated
· ADG, IMDG, IATA	Not Reguated
· Environmental hazards: · Marine pollutant:	No
Special precautions for user Transport in bulk according to Annex II of I	Not applicable. Marpol and the
IBC Code	Not applicable.
· 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

All ingredients are listed.

(Contd. on page 7)





Printing date 01.09.2020 Revision: 24.06.2020

Trade name: Precision Plus Protein Dual Color Standards

(Contd. of page 6)

· Standard for the Uniform Scheduling of Medicines and Poisons

77-86-1 Tris(hydroxymethyl)aminomethane

S4

· 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	20-35

- · 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

H302 Harmful if swallowed.

H303 May be harmful if swallowed.

H311 Toxic in contact with skin.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H333 May be harmful if inhaled.

H335 May cause respiratory 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

Acute Tox. 4: Acute toxicity - oral - Category 4

Acute Tox. 5: Acute toxicity - oral – Category 5 Acute Tox. 3: Acute toxicity - dermal – Category 3

Skin Irrit. 2: Skin corrosion/irritation - Category 2

(Contd. on page 8)



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 24.06.2020

Trade name: Precision Plus Protein Dual Color Standards

(Contd. of page 7)

Skin Corr. 3: Skin corrosion/irritation – Category 3
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.





Printing date 01.09.2020 Revision: 01.09.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

- · Product identifier
- Trade name: Profinity™ IMAC Nickel Charged Resin
- · Article number:

1560131, 1560133, 1560135, 1560137, 9706117, 10008493, 10021657, 10047736, 10047737, 10047738, 10047739

· 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



GHS07

- · 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 01.09.2020 Revision: 01.09.2020

Trade name: Profinity™ IMAC Nickel Charged 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 eve contact Rinse opened eve 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 01.09.2020 Revision: 01.09.2020

Trade name: Profinity™ IMAC Nickel Charged 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.

- · 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 01.09.2020 Revision: 01.09.2020

Trade name: Profinity™ IMAC Nickel Charged Resin

	(Contd. of pag
Odour: Odour threshold:	Alcohol-like 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 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:	Fully miscible
Partition coefficient: n-octanol/water:	Not determined.
Viscosity: dynamic: kinematic:	Not applicable. Not applicable.
Solvent content: Organic solvents: Water:	15.2 % 78.3 %
Solids content: Other information	6.6 % 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 01.09.2020 Revision: 01.09.2020

Trade name: Profinity™ IMAC Nickel Charged Resin

(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

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.

(Contd. on page 6)





Printing date 01.09.2020 Revision: 01.09.2020

Trade name: Profinity™ IMAC Nickel Charged Resin

(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
 7440-02-0 nickel
 - · 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 01.09.2020 Revision: 01.09.2020

Trade name: Profinity™ IMAC Nickel Charged Resin

(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.

AU





Printing date 01.09.2020 Revision: 25.07.2020

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

1 Identification

- · Product identifier
- · Trade name: Micro Bio-Spin™ 6 or 30 Chromotography Column
- · Article number:

7326221, 7326225, 7326222, 7326227, 7326228, 7326229, 9703761, 9702866, 9704913, 9704914, 4306615, 10021659, 7326223, 7326226, 9702868, 7326224, 7326231, 7326232, 7326233, 9703762, 7326250, 7326251, 9703352, 7326250S, 4306616, 9702867, 7326221EDU

- 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: Not applicable.
- · Additional information For the wording of the listed hazard phrases refer to section 16.

AU



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 25.07.2020

Trade name: Micro Bio-Spin™ 6 or 30 Chromotography Column

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

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Printing date 01.09.2020 Revision: 25.07.2020

Trade name: Micro Bio-Spin™ 6 or 30 Chromotography Column

(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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · 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	vsical	and	Chemi	cal I	Proi	perties
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· General Information	• •	
· Appearance:		
Form:	Suspension	
Colour:	White	
· Odour:	Odourless	
· Odour threshold:	Not determined.	

• **pH-value at 20 °C:** 7.4

· Change in condition

Melting point/freezing point: undetermined **Initial boiling point and boiling range:** undetermined

· Information on basic physical and chemical properties

· Flash point: Not applicable Not determined.

· Flammability (solid, gaseous) Not applicable.

• **Decomposition temperature:** Not determined.

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

· Explosive properties: Not determined.

· Explosion limits:

Lower: Not determined. Upper: Not determined.

(Contd. on page 4)





Printing date 01.09.2020 Revision: 25.07.2020

Trade name: Micro Bio-Spin™ 6 or 30 Chromotography Column

	(Contd. of pag	je 3)
· Vapour pressure at 20 °C:	23 hPa	
· Density:	Not determined	
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:		
Water:	84.7 %	
Solids content:	15.3 %	
· 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.

12 Ecological Information

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

(Contd. on page 5)





Printing date 01.09.2020 Revision: 25.07.2020

Trade name: Micro Bio-Spin™ 6 or 30 Chromotography Column

(Contd. of page 4)

- · 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

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	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
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Mar	pol and the Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
	(Contd. on page 6





Printing date 01.09.2020 Revision: 25.07.2020

Trade name: Micro Bio-Spin™ 6 or 30 Chromotography Column

(Contd. of page 5)

· 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

1185-53-1 Tris-HCI

26628-22-8 sodium azide

· 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
- · 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

ELINCS: European List of Notified 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 01.09.2020 Revision: 28.07.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

· Product identifier

· Trade name: Dihydrofolic Acid Substrate

· Article number: 247-1

• **CAS Number:** 4033-27-6

· 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

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation.

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



GHS07

- · Signal word Warning
- · Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves / eye protection / face protection.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

(Contd. on page 2)





Printing date 01.09.2020 Revision: 28.07.2020

Trade name: Dihydrofolic Acid Substrate

(Contd. of page 1)

Page 2/7

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

to do. Continue rinsing.

P405 Store locked up.

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

· 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:

4033-27-6 Dihydrofolic acid

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

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

- · 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:

Dilute with plenty of water.

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

(Contd. on page 3)



Page 3/7

Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 28.07.2020

Trade name: Dihydrofolic Acid Substrate

(Contd. of page 2)

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

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.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · 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: 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

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:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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 01.09.2020 Revision: 28.07.2020

Trade name: Dihydrofolic Acid Substrate

(Contd. of page 3)

· **Eye protection:** Safety glasses Tightly sealed goggles.

Information on basic physical and che	mical properties
General Information	mour proportion
Appearance:	
Form:	Solid.
Colour:	Light yellow
Odour:	Odourless
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/freezing point:	undetermined
Initial boiling point and boiling range	: undetermined
Flash point:	Not applicable
•	Not determined.
Flammability (solid, gaseous)	Not applicable.
Decomposition temperature:	Not determined.
Self igniting:	Not determined.
Explosive properties:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not determined.
Density:	Not determined
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.
Other information	No further relevant information available.



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Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 28.07.2020

Trade name: Dihydrofolic Acid Substrate

(Contd. of page 4)

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 Irritant to skin and mucous membranes.
- · Serious eye damage/irritation 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.
- · 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.

(Contd. on page 6)





Printing date 01.09.2020 Revision: 28.07.2020

Trade name: Dihydrofolic Acid Substrate

· Recommended cleansing agent: Water, if necessary with cleansing agents.

(Contd. of page 5)

14 Transport information

٠ (UN-I	Num	ber
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· 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 Not applicable.

15 Regulatory information

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

Substance is not listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

Substance is not listed.

· Australia: Priority Existing Chemicals

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.

(Contd. on page 7)



Page 7/7

Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 28.07.2020

Trade name: Dihydrofolic Acid Substrate

(Contd. of page 6)

· 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)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Skin Irrit. 2: Skin corrosion/irritation – Category 2

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.

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Page 1/6

Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 11.08.2020

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

1 Identification

· Product identifier

· Trade name: NADPH cofactor

· Article number: 10021673

• **CAS Number:** 2646-71-1 • **EC number:**

• **EC number:** 220-163-3

 \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:

2646-71-1 dihydronicotinamide-adenine dinucleotide phosphate, tetrasodium salt

- · Identification number(s):
- · EC number: 220-163-3

(Contd. on page 2)



Page 2/6

Safety Data Sheet according to WHS Regulations

Printing date 01.09.2020 Revision: 11.08.2020

Trade name: NADPH cofactor

(Contd. of page 1)

· Additional 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: 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 01.09.2020 Revision: 11.08.2020

Trade name: NADPH cofactor

(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 Prope	erties en la companya de la companya de la companya de la companya de la companya de la companya de la companya	
Information on basic physical and General Information	chemical properties	
Appearance:		
Form:	Solid.	
Colour:	Yellowish	
Odour:	Odourless	
Odour threshold:	Not determined.	
pH-value:	Not applicable.	
Change in condition Melting point/freezing point: Initial boiling point and boiling ra	undetermined Inge: 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.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	

(Contd. on page 4)





Printing date 01.09.2020 Revision: 11.08.2020

Trade name: NADPH cofactor

		(Contd. of page 3)
· Vapour pressure:	Not applicable.	
Density:Relative densityVapour densityEvaporation rate	Not determined Not determined. Not applicable. Not applicable.	
· Solubility in / Miscibility with Water:	Fully miscible	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity: dynamic: kinematic:	Not applicable. Not applicable.	
Solids content: Other information	100.0 % 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 01.09.2020 Revision: 11.08.2020

Trade name: NADPH cofactor

(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:

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.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

4 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	Not Neguateu
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 o IBC Code	of Marpol and the Not applicable.

(Contd. on page 6)





Printing date 01.09.2020 Revision: 11.08.2020

Trade name: NADPH cofactor

(Contd. of page 5)

· 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 not listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

Substance is not listed.

· Australia: Priority Existing Chemicals

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

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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