

01.09.2020 Kit components

Product code	Description
1665060 1665060EDU	SDS PAGE Electrophoresis Module Kit
Components:	
1610732	10X Tris/Glycine/SDS Buffer
1610737	2X Laemmli Sample Buffer
1610786	Bio-Safe Coomassie Stain
1610374	Precision Plus Protein Dual Color Standards





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

- · 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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Physical and Chemical Proposition on basic physical and	
 Information on basic physical and General Information 	chemical properties
· 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:	
			-	-					i

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)



Page 7/7

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 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)

Page 2/7

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)



Page 3/7

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)



Page 5/7

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.

Page 1/7

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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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)



Page 3/7

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	mour 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 °C
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.



Page 5/7

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 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)



Page 2/8

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)



Page 3/8

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 Propertie	es estate de la companya de la comp Estate de la companya
· 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	56-81-5 glycerol		
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	, rot roguetos
· 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	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 eve 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)



Page 8/8

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.