

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	



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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.09.2020 Revision: 24.07.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name: 10X Tris/Glycine/SDS Buffer
- · Article number: 1610732, 9701906, 1610772, 1610732EDU, 1610772EDU, 10021723
- · 1.2 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
- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Bio-Rad Israel 14 Homa Street

New Industrial Area, P.O. Box 5044

Rishon Le Zion 75655

Israel

phone: 972-3-963-6050 fax: 972-3-951-4129

Information department: phone: 972-3-963-6050
1.4 Emergency telephone number: 972-3-951-4127

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.
- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable
- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 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.

SECTION 4: First aid measures

- · 4.1 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.

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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.09.2020 Revision: 24.07.2020

Trade name: 10X Tris/Glycine/SDS Buffer

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- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

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

SECTION 6: Accidental release measures

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

Dilute with plenty of water.

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

· 6.3 Methods and material for containment and cleaning up:

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

· 6.4 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.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · 7.2 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.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 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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Printing date 01.09.2020 Revision: 24.07.2020

Trade name: 10X Tris/Glycine/SDS Buffer

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- · Additional information: The lists that were valid during the creation were used as basis.
- · 8.2 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

9.1 Information on basic physical and c	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:	undetermined	
Initial boiling point and boiling range:	: 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:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapour pressure at 20 °C:	23 hPa	
Density at 20 °C:	0.98915 g/cm ³	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible	





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Trade name: 10X Tris/Glycine/SDS Buffer

	(Contd. of pa	age 3)
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity: dynamic: kinematic:	Not determined. Not determined.	
· Solvent content: Water:	81.4 %	
Solids content: - 9.2 Other information	18.6 % No further relevant information available.	

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

Troub toxiony Bassa on available data, the slassification of the met.		
· LD/LC5	0 valu	es that are relevant for classification:
glycine		
Oral	LD50	7,930 mg/kg (rat)
Dermal	LD50	5,200 mg/kg (rat)
	•	methyl)aminomethane
Oral	LD50	5,900 mg/kg (Rat)
Dermal	LD50	>5,000 mg/kg (Rat)

- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.

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Trade name: 10X Tris/Glycine/SDS Buffer

· Aspiration hazard Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 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.

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

SECTION 13: Disposal considerations

- · 13.1 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.

SECTION 14: Transport information		
· 14.1 UN-Number		
· ADR, ADN, IMDG, IATA	Not Reguated	
· 14.2 UN proper shipping name		
ADR	Not Reguated	
	Not Reguated	
ADN, IMDG, IATA	Not Reguated	
14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA		
Class	Not Reguated	
14.4 Packing group		
ADR, IMDG, IATA	Not Reguated	
		(Contd. on page





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Trade name: 10X Tris/Glycine/SDS Buffer

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

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · 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.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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

· * Data compared to the previous version altered.

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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.09.2020 Revision: 13.02.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name: 2X Laemmli Sample Buffer
- · Article number: 1610737, 1610737EDU, 1610737XTU
- · 1.2 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
- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Bio-Rad Israel 14 Homa Street

New Industrial Area, P.O. Box 5044

Rishon Le Zion 75655

Israel

phone: 972-3-963-6050 fax: 972-3-951-4129

Information department: phone: 972-3-963-6050
1.4 Emergency telephone number: 972-3-951-4127

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Acute Tox. 5 H333 May be harmful if inhaled.

Skin Corr. 3 H316 Causes mild skin irritation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

- · 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.

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

SECTION 3: Composition/information on ingredients

- · 3.2 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 1907/2006/EC, Article 31

Printing date 01.09.2020 Revision: 13.02.2020

Trade name: 2X Laemmli Sample Buffer

		(Conto	d. of page 1)
· Dangerous compo	nents:		
EINECS: 200-289-5	glycerol	Acute Tox. 5, H303; Acute Tox. 5, H333	20-35%
EINECS: 205-788-1	sodium dodecyl sulphate	Flam. Sol. 2, H228 Acute Tox. 3, H301; Acute Tox. 3, H311 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	1-2.5%

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

SECTION 4: First aid measures

- · 4.1 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.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

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

SECTION 6: Accidental release measures

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

Dilute with plenty of water.

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

· 6.3 Methods and material for containment and cleaning up:

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

· 6.4 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.

SECTION 7: Handling and storage

• 7.1 Precautions for safe handling No special measures required.

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Printing date 01.09.2020 Revision: 13.02.2020

Trade name: 2X Laemmli Sample Buffer

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- · Information about protection against explosions and fires: No special measures required.
- · 7.2 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.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 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.
- · 8.2 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

SECTION 9: Physical and chemical properties

- · 9.1 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 ℃: 6.8

· Change in condition

Melting point/freezing point: undetermined Initial boiling point and boiling range: 100 °C

· Flash point: > 100 °C

· Flammability (solid, gaseous) Not applicable.

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Trade name: 2X Laemmli Sample Buffer

	(Contd. of page
· 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.
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: 9.2 Other information	2.9 % No further relevant information available.

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity

May be harmful if inhaled.

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Printing date 01.09.2020 Revision: 13.02.2020

Trade name: 2X Laemmli Sample Buffer

		(Contd. of page 4)
· LD/LC50	values tha	t are relevant for classification:
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)
sodium d	odecyl su	lphate
Oral	LD50	1,288 mg/kg (rat)
Dermal	LD50	580 mg/kg (Rabbit)

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes mild skin irritation.

- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 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.

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

SECTION 13: Disposal considerations

- · 13.1 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: 13.02.2020

Trade name: 2X Laemmli Sample Buffer

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

SECTION 14: Transport information	
14.1 UN-Number ADR, ADN, IMDG, IATA	Not Reguated
14.2 UN proper shipping name ADR ADN, IMDG, IATA	Not Reguated Not Reguated Not Reguated
14.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA Class	Not Reguated
14.4 Packing group ADR, IMDG, IATA	Not Reguated
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex I and the IBC Code	I of Marpol Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Not Reguated

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · 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.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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Trade name: 2X Laemmli Sample Buffer

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SECTION 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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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. Sol. 2: Flammable solids – Category 2

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

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

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

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

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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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.09.2020 Revision: 12.06.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name: Bio-Safe Coomassie Stain
- · Article number: 1610786, 1610787, 1610786S, 1610787EDU, 9704607, 4307131, 4307045, 1610786EDU
- · 1.2 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
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Israel 14 Homa Street

New Industrial Area, P.O. Box 5044

Rishon Le Zion 75655

Israel

phone: 972-3-963-6050 fax: 972-3-951-4129

Information department: phone: 972-3-963-6050
 1.4 Emergency telephone number: 972-3-951-4127

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Acute Tox. 5 H333 May be harmful if inhaled.

Skin Corr. 3 H316 Causes mild skin irritation.

- · 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

- · 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.

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

SECTION 3: Composition/information on ingredients

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

(Contd. on page 2)



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Printing date 01.09.2020 Revision: 12.06.2020

Trade name: Bio-Safe Coomassie Stain

(00	
	2.5-5%

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· Dangerous components:			
EINECS: 231-633-2	phosphoric acid	Skin Corr. 1B, H314	2.5-5%
EINECS: 200-659-6	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.

SECTION 4: First aid measures

- · 4.1 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.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

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

SECTION 6: Accidental release measures

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

Dilute with plenty of water.

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

· 6.3 Methods and material for containment and cleaning up:

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

· 6.4 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.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling No special measures required.

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Trade name: Bio-Safe Coomassie Stain

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- · Information about protection against explosions and fires: No special measures required.
- · 7.2 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.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 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.
- · 8.2 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

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · 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.

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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.09.2020 Revision: 12.06.2020

Trade name: Bio-Safe Coomassie Stain

	(Contd. of page 3
· 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 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity

May be harmful if inhaled.

(Contd. on page 5)



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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.09.2020 Revision: 12.06.2020

Trade name: Bio-Safe Coomassie Stain

(Contd. of page 4)

· LD/LC50 values that are relevant for classification:

methanol

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

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes mild skin irritation.

- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 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.

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

SECTION 13: Disposal considerations

- · 13.1 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.

(Contd. on page 6)



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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.09.2020 Revision: 12.06.2020

Trade name: Bio-Safe Coomassie Stain

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

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · 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.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.09.2020 Revision: 12.06.2020

Trade name: Bio-Safe Coomassie Stain

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· 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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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.



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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.09.2020 Revision: 24.06.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name: Precision Plus Protein Dual Color Standards
- · Article number: 1610374, 1610374S, 1610394, 10022171, 1610374EDU, 4307147, 1610374TGX
- · 1.2 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
- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Bio-Rad Israel 14 Homa Street

New Industrial Area, P.O. Box 5044

Rishon Le Zion 75655

Israel

phone: 972-3-963-6050 fax: 972-3-951-4129

Information department: phone: 972-3-963-6050
 1.4 Emergency telephone number: 972-3-951-4127

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Acute Tox. 5 H333 May be harmful if inhaled.

Skin Corr. 3 H316 Causes mild skin irritation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

- · 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.

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

SECTION 3: Composition/information on ingredients

- · 3.2 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 1907/2006/EC, Article 31

Printing date 01.09.2020 Revision: 24.06.2020

Trade name: Precision Plus Protein Dual Color Standards

 (Contd. of page 1)

 Dangerous components:

 EINECS: 200-289-5 glycerol
 Acute Tox. 5, H303; Acute Tox. 5, H333
 20-35%

 EINECS: 205-788-1 sodium dodecyl sulphate
 Flam. Sol. 2, H228 Acute Tox. 3, H301; Acute Tox. 3, H311 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335
 1-2.5%

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

SECTION 4: First aid measures

- · 4.1 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.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

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

SECTION 6: Accidental release measures

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

Dilute with plenty of water.

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

· 6.3 Methods and material for containment and cleaning up:

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

· 6.4 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.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling No special measures required.

(Contd. on page 3)





Printing date 01.09.2020 Revision: 24.06.2020

Trade name: Precision Plus Protein Dual Color Standards

(Contd. of page 2)

- · Information about protection against explosions and fires: No special measures required.
- · 7.2 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.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 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.
- · 8.2 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

SECTION 9: Physical and chemical properties

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

Form: Liquid
Colour: Blue
Odour: Rotten

· Odour threshold: Not determined.

• **pH-value at 20 °C:** 6.8

· Change in condition

Melting point/freezing point: undetermined Initial boiling point and boiling range: 100 °C

· Flash point: > 100 °C

· Flammability (solid, gaseous) Not applicable.

(Contd. on page 4)



Printing date 01.09.2020 Revision: 24.06.2020

Trade name: Precision Plus Protein Dual Color Standards

	(Contd. of page
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.
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:	30.0 % 66.3 %
Solids content: 9.2 Other information	3.7 % No further relevant information available.

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity

May be harmful if inhaled.

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Printing date 01.09.2020 Revision: 24.06.2020

Trade name: Precision Plus Protein Dual Color Standards

		(Contd. of page 4)
· LD/LC50	values tha	t are relevant for classification:
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)
sodium d	odecyl su	lphate
Oral	LD50	1,288 mg/kg (rat)
Dermal	LD50	580 mg/kg (Rabbit)

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes mild skin irritation.

- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 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.

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

SECTION 13: Disposal considerations

- · 13.1 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)



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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.09.2020 Revision: 24.06.2020

Trade name: Precision Plus Protein Dual Color Standards

(Contd. of page 5)

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

SECTION 14: Transport information		
· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Not Reguated	
· 14.2 UN proper shipping name · ADR	Not Reguated	
· ADN, IMDG, IATA	Not Reguated Not Reguated	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	Not Reguated	
· 14.4 Packing group · ADR, IMDG, IATA	Not Reguated	
· 14.5 Environmental hazards: · Marine pollutant:	No	
· 14.6 Special precautions for user	Not applicable.	
· 14.7 Transport in bulk according to Annex I and the IBC Code	II of Marpol Not applicable.	
· UN "Model Regulation":	Not Reguated	

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · 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.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

(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)

SECTION 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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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. Sol. 2: Flammable solids – Category 2

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

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

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

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

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.

·IL