

## 06.08.2020

1706435

1705016 1706606

## Kit components

Product code	Description
1705014 1705014EDU	Immun-Star™ Goat Anti-Rabbit (GAR)-AP Intro Kit
Components:	
1706518	Goat Anti-Rabbit IgG (H+L) AP Conjugate
1705018	Immun-Star™ Substrate
1705019	Immun-Star™ Enhancer

Blotting Grade Blocker

10x TBS

Tween 20





Printing date 06.08.2020 Revision: 22.07.2020

#### SECTION 1: Identification of the substance or mixture and of the supplier

- · 1.1 Product identifier
- · Trade name: Goat Anti-Rabbit IgG (H+L) AP Conjugate
- · Article number: 1706518, 1706518EDU, 1721016, 9702903, 9730518, 9701104
- · 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 Laboratories Pty Ltd
   189 Bush Road

Albany, Auckland New Zealand

Phone 64-9-415-2280 FAX 64-9-415-2284

Information department: sales.nz@bio-rad.com
 1.4 Emergency telephone number: 64-9801-0034

## 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

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

7732-18-5 water

- · Identification number(s):
- · EC number: 231-791-2
- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

CAS: 26628-22-8 sodium azide Acute Tox. 2, H300 0.025-<0.1% EINECS: 247-852-1

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



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## Safety Data Sheet in accordance with HSNO

Printing date 06.08.2020 Revision: 22.07.2020

Trade name: Goat Anti-Rabbit IgG (H+L) AP Conjugate

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#### **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: Fire fighting 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: 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

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 precautions are necessary if used correctly.
- · 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.





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Trade name: Goat Anti-Rabbit IgG (H+L) AP Conjugate

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## 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:

#### 26628-22-8 sodium azide

WES (New Zealand, (English)) Ceiling limit: 0.29 mg/m³, 0.11 ppm

IOELV (European Union) Short-term value: 0.3 mg/m³

Long-term value: 0.1 mg/m<sup>3</sup>

Skin

- · 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: Fluid
Colour: Colourless
Odour: Odourless
Odour threshold: Not determined.

• pH-value: Not determined.

· Change in condition

Melting point/freezing point: 0 °C

Initial boiling point and boiling range: undetermined

· Flash point: Not applicable Not determined.

· Flammability (solid, gaseous) Not applicable.

· Decomposition temperature: Not determined.

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

· Explosive properties: Not determined.

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Trade name: Goat Anti-Rabbit IgG (H+L) AP Conjugate

	(Contd. of pag	ge :
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
· Density at 20 °C:	1.005 g/cm³	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Water:	98.0 %	
Solids content:	2.0 %	
· 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 Based on available data, the classification criteria are not met.
- · LD/LC50 values that are relevant for classification:

#### 26628-22-8 sodium azide

Oral LD50 (static) 27 mg/kg (Rat) 27 mg/kg (mouse)

- · 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.

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Trade name: Goat Anti-Rabbit IgG (H+L) AP Conjugate

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- · 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.

SECTION 14.	: Transport information

· 14.1 UN-Number

· ADR, ADN, IMDG, IATA Not Reguated

· 14.2 UN proper shipping name

· ADR Not Reguated
Not Requated

· ADN, IMDG, IATA Not Reguated

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Trade name: Goat Anti-Rabbit IgG (H+L) AP Conjugate

		(Contd. of page 5)
· 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 of and the IBC Code	f <b>Marpol</b> Not applicable.	
· UN "Model Regulation":	Not Reguated	

#### SECTION 15: Regulatory information

· New Zealand Inventory of Chemicals

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- 7732-18-5 water 7647-14-5 sodium chloride 26628-22-8 sodium azide · HSNO Approval numbers HSR003078

26628-22-8 sodium azide

- · 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)

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#### Trade name: Goat Anti-Rabbit IgG (H+L) AP Conjugate

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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 Acute Tox. 2: Acute toxicity - oral - Category 2

· \* Data compared to the previous version altered.



Printing date 06.08.2020 Revision: 29.07.2020

#### SECTION 1: Identification of the substance or mixture and of the supplier

- · 1.1 Product identifier
- · Trade name: Immun-Star™ Substrate
- · Article number: 1705018, 1705018EDU, 9702837, 9702838
- · 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 Laboratories Pty Ltd

Bio-Rad Laboratories Pty Ltd 189 Bush Road

Albany, Auckland New Zealand

Phone 64-9-415-2280 FAX 64-9-415-2284

- · Information department: sales.nz@bio-rad.com
- · 1.4 Emergency telephone number: 64-9801-0034

#### SECTION 2: Hazards identification

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

Eye Irrit. 2 H319 Causes serious eye 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



GHS07

- · Signal word Warning
- · Hazard statements

H319 Causes serious eye irritation.

· Precautionary statements

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

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

to do. Continue rinsing.

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

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

- N



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## Safety Data Sheet in accordance with HSNO

Printing date 06.08.2020 Revision: 29.07.2020

Trade name: Immun-Star™ Substrate

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## **SECTION 3: Composition/Information on ingredients**

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

7732-18-5 water

- · Identification number(s):
- · EC number: 231-791-2
- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

	Dangerou	is c	omp	onents	:
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CAS: 111-42-2	2,2'-iminodiethanol	STOT RE 2, H373	1-2.5%
EINECS: 203-868-0		Eye Dam. 1, H318	
		Acute Tox. 4, H302; Skin Irrit. 2, H315	

· 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. If symptoms persist, consult a doctor.
- · 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: Fire fighting 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: Wear self-contained respiratory protective device.

#### 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.
- · 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.

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Trade name: Immun-Star™ Substrate

See Section 13 for disposal information.

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## 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: Keep receptacle tightly sealed.
- · 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

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

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

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

· Eye protection:

Safety glasses

Tightly sealed goggles.

## SECTION 9: Physical and chemical properties

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

Form: Fluid

(Contd. on page 4)





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Trade name: Immun-Star™ Substrate

	(Contd. of page
Colour: · Odour: · Odour threshold:	Colourless Odourless Not determined.
· pH-value at 20 °C:	10.6
· Change in condition Melting point/freezing point: Initial boiling point and boiling range	0 °C : undetermined
· Flash point:	Not applicable Not determined.
Flammability (solid, gaseous)	Not applicable.
Decomposition temperature:	Not determined.
· Self igniting:	Product is not selfigniting.
Explosive properties:	Not determined.
Explosion limits: Lower: Upper:	Not determined. Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density: · Relative density · 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:	2.0 % 95.0 %
Solids content: 9.2 Other information	3.0 % 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.

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Trade name: Immun-Star™ Substrate

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- · 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.
- · LD/LC50 values that are relevant for classification:

#### 111-42-2 2,2'-iminodiethanol

Oral LD50 710 mg/kg (rat)
Dermal LD50 12,200 mg/kg (rbt)

- Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Causes serious eye irritation.
- · 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: Generally not hazardous for water.
- · 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.

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Trade name: Immun-Star™ Substrate

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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
- New Zealand Inventory of Chemicals

7732-18-5 water

111-42-2 2,2'-iminodiethanol

· HSNO Approval numbers

111-42-2 | 2,2'-iminodiethanol | HSR002962

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

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Trade name: Immun-Star™ Substrate

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

Class	Share in %
NK	1-2.5

- · Water hazard class: Generally not 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 acronvms:

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

Acute Tox. 4: Acute toxicity - oral - Category 4 Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

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

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

· \* Data compared to the previous version altered.





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### SECTION 1: Identification of the substance or mixture and of the supplier

- · 1.1 Product identifier
- · Trade name: Immun-Star™ Enhancer
- · Article number: 1705019, 1705019EDU, 9702900
- · 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 Laboratories Pty Ltd
   189 Bush Road
   Albany, Auckland

New Zealand Phone 64-9-415-2280 FAX 64-9-415-2284

Information department: sales.nz@bio-rad.com
 1.4 Emergency telephone number: 64-9801-0034

## 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

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

7732-18-5 water

- · Identification number(s):
- · EC number: 231-791-2
- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

Poly(benzyltributyl)ammonium chloride

Acute Tox. 4, H302 1-2.5%

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

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Printing date 06.08.2020 Revision: 29.07.2020

Trade name: Immun-Star™ Enhancer

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#### **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: Fire fighting 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.
- · 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.

N7





Printing date 06.08.2020 Revision: 29.07.2020

Trade name: Immun-Star™ Enhancer

(Contd. of page 2)

## 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

- · 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

<b>SECTION 9: Ph</b>	vsical and c	hemical	nronartias
SECTION 3. FIL	ysicai ailu c	Hellifual	properties

<ul> <li>9.1 Information on basic physical a</li> <li>General Information</li> </ul>	and chemical properties
· Appearance:	
Form: Colour: · Odour:	Fluid
	Colourless
	Odourless
· Odour threshold:	Not determined.
· pH-value at 20 °C:	9.5
Change in condition  Melting point/freezing point:	0 °C

Not applicable.

· Flammability (solid, gaseous)

Initial boiling point and boiling range: undetermined

· Flash point: Not applicable Not determined.

· Decomposition temperature: Not determined.

Self igniting: Product is not selfigniting.

· Explosive properties: Not determined.

· Explosion limits:

Lower: Not determined. Not determined. Upper:

(Contd. on page 4)





Printing date 06.08.2020 Revision: 29.07.2020

Trade name: Immun-Star™ Enhancer

		Contd. of page 3
· Vapour pressure at 20 °C:	23 hPa	
· Density:	Not determined	
Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Water:	95.0 %	
Solids content:	3.0 %	
· 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 Based on available data, the classification criteria are not met.
- 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.

(Contd. on page 5)





Printing date 06.08.2020 Revision: 29.07.2020

Trade name: Immun-Star™ Enhancer

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

(Contd. of page 4)

### **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: Generally not hazardous for water.
- 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	Not Degreeted	
· 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	
		(Contd. on page





Printing date 06.08.2020 Revision: 29.07.2020

Trade name: Immun-Star™ Enhancer

	(Contd. of page 5)
· 14.6 Special precautions for user	Not applicable.
<ul> <li>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</li> </ul>	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
- · New Zealand Inventory of Chemicals

7732-18-5 water

· HSNO Approval numbers

None of the ingredients is listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · National regulations
- · Water hazard class: Generally not hazardous for water.
- · 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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

\* Data compared to the previous version altered.

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Printing date 06.08.2020 Revision: 24.07.2020

### SECTION 1: Identification of the substance or mixture and of the supplier

· 1.1 Product identifier

· Trade name: 10x TBS

· Article number: 1706435, 9702901, 1706435EDU, 9703155

· 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 Laboratories Pty Ltd 189 Bush Road Albany, Auckland

New Zealand

Phone 64-9-415-2280 FAX 64-9-415-2284

Information department: sales.nz@bio-rad.com
 1.4 Emergency telephone number: 64-9801-0034

## 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 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.

(Contd. on page 2)





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Trade name: 10x TBS

(Contd. of page 1)

• 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

## SECTION 5: Fire fighting 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: No special measures required.
- · 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

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.

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

(Contd. on page 3)





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Trade name: 10x TBS

(Contd. of page 2)

- · 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 a	and chemical properties	
· 9. i information on basic physical a · General Information	nd chemical properties	
· Appearance:		
Form:	Fluid	
Colour:	Colourless	
· Odour:	Odourless	
· Odour threshold:	Not determined.	
· pH-value:	Not determined.	
Change in condition		
Melting point/freezing point:	undetermined	
Initial boiling point and boiling ra	nge: undetermined	
· Flash point:	Not applicable	
,	Not determined.	
· Flammability (solid, gaseous)	Not applicable.	
Decomposition temperature:	Not determined.	
· Self igniting:	Product is not selfigniting.	
Explosive properties:	Not determined.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
Density at 20 °C:	1.17958 g/cm³	
· Relative density	Not determined.	
Vapour density	Not determined.	
· Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible	

(Contd. on page 4)





Printing date 06.08.2020 Revision: 24.07.2020

Trade name: 10x TBS

		(Contd. of page 3)
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity: dynamic: kinematic:	Not determined. Not determined.	
· Solvent content: Water:	68.4 %	
Solids content: - 9.2 Other information	31.6 % 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.
- · 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.
- · 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.

(Contd. on page 5)





Printing date 06.08.2020 Revision: 24.07.2020

Trade name: 10x TBS

(Contd. of page 4)

- Additional ecological information:
- · General notes: Generally not hazardous for water.
- · 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.

SECTION 14: Transport information		
14.1 UN-Number	W. 5	
· 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 I	l of Marpol	
and the IBC Code	Not applicable.	
· UN "Model Regulation":	Not Reguated	

(Contd. on page 6)





Printing date 06.08.2020 Revision: 24.07.2020

Trade name: 10x TBS

(Contd. of page 5)

## **SECTION 15: Regulatory information**

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · New Zealand Inventory of Chemicals

All ingredients are listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · National regulations
- · Water hazard class: Generally not hazardous for water.
- · 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 acronvms:

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)

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 in accordance with HSNO

Printing date 06.08.2020 Revision: 27.03.2020

### SECTION 1: Identification of the substance or mixture and of the supplier

- · 1.1 Product identifier
- · Trade name: Blotting Grade Blocker
- · Article number: 1705016, 1705016EDU, 1706404, 1706404EDU, 1706404XTU, 9702905
- **CAS Number:** 9000-71-9
- **EC number:** 232-555-1
- · 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 Laboratories Pty Ltd
   189 Bush Road
   Albany, Auckland
   New Zealand

Phone 64-9-415-2280 FAX 64-9-415-2284

Information department: sales.nz@bio-rad.com
 1.4 Emergency telephone number: 64-9801-0034

#### SECTION 2: Hazards identification

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

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

9000-71-9 Casein from bovine milk

- Identification number(s):
- · EC number: 232-555-1
- · Additonal information: For the wording of the listed risk phrases refer to section 16.



Page 2/6

## Safety Data Sheet in accordance with HSNO

Printing date 06.08.2020 Revision: 27.03.2020

Trade name: Blotting Grade Blocker

(Contd. of page 1)

#### **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: Fire fighting 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: No special measures required.
- · 6.3 Methods and material for containment and cleaning up: Pick up mechanically.
- · 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.

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Printing date 06.08.2020 Revision: 27.03.2020

Trade name: Blotting Grade Blocker

(Contd. of page 2)

## 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: Not required.
- · 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.

- · 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	: Priysical allu	Chemicai pi	roperties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

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

· **pH-value:** Not applicable.

· Change in condition

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

· Flash point: Not applicable

· Flammability (solid, gaseous) Product is not flammable.

· **Decomposition temperature:** Not determined.

· Self igniting: Not determined.

· Explosive properties: Not determined.

· Explosion limits:

Lower:Not determined.Upper:Not determined.

· Vapour pressure: Not applicable.

· Density: Not determined

· Relative density Not determined.

· Vapour density Not applicable.

(Contd. on page 4)





Printing date 06.08.2020 Revision: 27.03.2020

Trade name: Blotting Grade Blocker

	(Contd. of page 3
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Soluble
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: dynamic: kinematic:	Not applicable. Not applicable.
Solids content:  · 9.2 Other information	100.0 % 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.
- · 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.
- · 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.

(Contd. on page 5)





Printing date 06.08.2020 Revision: 27.03.2020

Trade name: Blotting Grade Blocker

(Contd. of page 4)

- · Additional ecological information:
- · General notes: Generally not hazardous for water.
- · 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	
4.1 UN-Number	
ADR, ADN, IMDG, IATA	Not Reguated
4.2 UN proper shipping name	
ADR	Not Reguated
	Not Reguated
ADN, IMDG, IATA	Not Reguated
4.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA	
Class	Not Reguated
4.4 Packing group	
ADR, IMDG, IATA	Not Reguated
4.5 Environmental hazards:	
Marine pollutant:	No
4.6 Special precautions for user	Not applicable.
4.7 Transport in bulk according to Annex	II of Marpol
and the IBC Code	Not applicable.
Fransport/Additional information:	Not dangerous according to the above specifications.
JN "Model Regulation":	Not Reguated

(Contd. on page 6)





Printing date 06.08.2020 Revision: 27.03.2020

Trade name: Blotting Grade Blocker

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## **SECTION 15: Regulatory information**

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · New Zealand Inventory of Chemicals

Substance is listed.

· HSNO Approval numbers

Substance is not listed.

- · Directive 2012/18/EU
- Named dangerous substances ANNEX I Substance is not listed.
- · National regulations
- · Water hazard class: Generally not hazardous for water.
- · 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

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· \* Data compared to the previous version altered.

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## Safety Data Sheet in accordance with HSNO

Printing date 06.08.2020 Revision: 25.06.2020

## SECTION 1: Identification of the substance or mixture and of the supplier

- · 1.1 Product identifier
- · Trade name: Tween 20
- · Article number: 1706606, 1705017, 1706531, 1705017EDU, 1706531EDU, 1706531XTU, 9702906, 9701059, 25116
- **CAS Number:** 9005-64-5
- · NLP Number:

500-018-3

· 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 Laboratories Ptv

Bio-Rad Laboratories Pty Ltd 189 Bush Road Albany, Auckland New Zealand

Phone 64-9-415-2280 FAX 64-9-415-2284

- · Information department: sales.nz@bio-rad.com
- · 1.4 Emergency telephone number: 64-9801-0034

#### SECTION 2: Hazards identification

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

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

9005-64-5 Polysorbate 20

- · Identification number(s):
- · NLP Number: 500-018-3
- · Additonal information: For the wording of the listed risk phrases refer to section 16.



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## Safety Data Sheet in accordance with HSNO

Printing date 06.08.2020 Revision: 25.06.2020

Trade name: Tween 20

(Contd. of page 1)

#### **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: Fire fighting 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.
- · 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.

N7





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Trade name: Tween 20

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## 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: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.

Liquid

- · 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: Ph	ysical and	chemical	prope	rties

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

Colour:
Odour:
Odourless
Odour threshold:
Not determined.

PH-value:
Not determined.

· Change in condition

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

· Flash point: 110 °C

· Flammability (solid, gaseous) Not applicable.

· **Decomposition temperature:** Not determined.

· Self igniting: Not determined.

· Explosive properties: Not determined.

· Explosion limits:

Lower: Not determined.
Upper: Not determined.

· Vapour pressure: Not determined.

• **Density at 20 °C:** 1.105 g/cm<sup>3</sup>

· Relative density Not determined.

(Contd. on page 4)





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Trade name: Tween 20

		(Contd. of page 3)
· Vapour density · Evaporation rate	Not determined. Not determined.	
· Solubility in / Miscibility with Water:	Fully miscible	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity: dynamic at 20°C: kinematic:	250-450 mPas Not determined.	
Solids content: · 9.2 Other information	0.0 % 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.
- · 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.
- · 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.

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Trade name: Tween 20

(Contd. of page 4)

- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes: Generally not hazardous for water.
- · 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.

ECTION 14: Transport information	
4.1 UN-Number	
IDR, ADN, IMDG, IATA	Not Reguated
4.2 UN proper shipping name	
ADR	Not Reguated
	Not Reguated
IDN, IMDG, IATA	Not Reguated
4.3 Transport hazard class(es)	
DR, ADN, IMDG, IATA	
Class	Not Reguated
4.4 Packing group	
ADR, IMDG, IATA	Not Reguated
4.5 Environmental hazards:	
flarine pollutant:	No
4.6 Special precautions for user	Not applicable.
4.7 Transport in bulk according to Annex I	l of Marpol
nd the IBC Code	Not applicable.
ransport/Additional information:	Not dangerous according to the above specifications.
IN "Model Regulation":	Not Reguated





Printing date 06.08.2020 Revision: 25.06.2020

Trade name: Tween 20

(Contd. of page 5)

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