

03.08.2020

**Kit components**

Product code	Description
<b>1704155</b> <b>1704155EDU</b>	<b>Trans-Blot Turbo Starter Kit</b>

## Components:

1620172	Trans-Blot Transfer Pack, 0.2 µ PVDF Membrane
1704158	Trans-Blot Transfer Pack, 0.2 µ Mini Nitrocellulose Membrane
1610376	Precision Plus Protein Western-C Standards
1610380	StrepTactin-HRP Conjugate 0.3 ml
1704159	Trans-Blot Turbo Transfer Pack, 0.2 µ Midi Nitrocellulose Membrane

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

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

- **1.1 Product identifier**
- **Trade name:** Trans-Blot Transfer Pack, 0.2 µ PVDF Membrane
- **Article number:**  
1620172, 1620173, 1620174, 1620175, 1620176, 1620177, 1620255, 1704153, 1704154, 4307573, 10017732, 10017731
- **CAS Number:**  
24937-79-9
- **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 Pacific Ltd.  
Unit 1101 DCH Commercial Centre  
25 Westlands Road  
Quarry Bay  
Hong Kong  
phone: 852-2789-3300 fax: 852-2789-1290
- **Information department:** sales.hongkong@bio-rad.com
- **1.4 Emergency telephone number:** 852-2789-3300

### SECTION 2: Hazards identification

- **Emergency overview:**  
White, Solid. No Data Available
- **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:**  
24937-79-9 Polyvinylidene fluoride
- **Additional information:** For the wording of the listed risk phrases refer to section 16.

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: Trans-Blot Transfer Pack, 0.2 µ PVDF Membrane

(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: 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:** 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.

HK  
(Contd. on page 3)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: Trans-Blot Transfer Pack, 0.2 µ PVDF Membrane

(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 through 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:	Solid.
Colour:	White
Odour:	Odourless
Odour threshold:	Not determined.

· **pH-value:** Not applicable.

##### · Change in condition

Melting point/freezing point:	230 °C
Initial boiling point and boiling range:	undetermined

· **Flash point:** Not applicable  
Not determined.

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

· **Decomposition temperature:** Not determined.

· **Self igniting:** Not determined.

· **Explosive properties:** Not determined.

##### · Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· **Vapour pressure:** Not applicable.

· **Density:** Not determined

· **Relative density** Not determined.

(Contd. on page 4)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: Trans-Blot Transfer Pack, 0.2 µ PVDF Membrane

(Contd. of page 3)

· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Fully miscible
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: dynamic:	Not applicable.
kinematic:	Not applicable.
· Solids content:	100.0 %
· 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 (carcinogenicity, 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.

(Contd. on page 5)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

**Trade name: Trans-Blot Transfer Pack, 0.2 µ PVDF Membrane**

(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.

### SECTION 14: Transport information

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Number</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> </ul>  | <p>Not Reguated</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>ADN, IMDG, IATA</b></li> </ul>           | <p>Not Reguated</p> <p>Not Reguated</p> <p>Not Reguated</p> |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transport hazard class(es)</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> <li>· <b>Class</b></li> </ul> | <p>Not Reguated</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.4 Packing group</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | <p>Not Reguated</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.5 Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> </ul>                                | <p>No</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.6 Special precautions for user</b></li> </ul>  | <p>Not applicable.</p>                                      |
| <ul style="list-style-type: none"> <li>· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b></li> </ul>                        | <p>Not applicable.</p>                                      |
| <ul style="list-style-type: none"> <li>· <b>Transport/Additional information:</b></li> </ul>  | <p>Not dangerous according to the above specifications.</p> |
| <ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>   | <p>Not Reguated</p>   |

HK

(Contd. on page 6)

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

Printing date 03.08.2020

Revision: 29.07.2020

**Trade name: Trans-Blot Transfer Pack, 0.2 µ PVDF Membrane**

(Contd. of page 5)

**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** 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  
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.**

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 28.07.2020

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

- **1.1 Product identifier**
- **Trade name:** Trans-Blot Transfer Pack, 0.2 µ Mini Nitrocellulose Membrane
- **Article number:** 1704158, 10017733
- **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 Pacific Ltd.  
Unit 1101 DCH Commercial Centre  
25 Westlands Road  
Quarry Bay  
Hong Kong
- **Information department:** sales.hongkong@bio-rad.com
- **1.4 Emergency telephone number:** 852-2789-3300

phone: 852-2789-3300 fax: 852-2789-1290

### SECTION 2: Hazards identification

- **Emergency overview:**  
White, Liquid on inert carrier material, No Data Available
- **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:**

CAS: 64-17-5	ethanol	Flam. Liq. 2, H225	10-20%
EINECS: 200-578-6			

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



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 28.07.2020

Trade name: Trans-Blot Transfer Pack, 0.2 µ Mini Nitrocellulose Membrane

(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 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**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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 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.

HK

(Contd. on page 3)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 28.07.2020

Trade name: Trans-Blot Transfer Pack, 0.2 µ Mini Nitrocellulose Membrane

(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 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 through 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 on inert carrier material
Colour:	White
Odour:	Odourless
Odour threshold:	Not determined.
  - **pH-value at 20 °C:** 8.9
  - **Change in condition**

Melting point/freezing point:	undetermined
Initial boiling point and boiling range:	78 °C
  - **Flash point:** 23 - 60 °C
  - **Flammability (solid, gaseous)** Not applicable.
  - **Ignition temperature:** 425 °C
  - **Decomposition temperature:** Not determined.
  - **Self igniting:** Product is not selfigniting.
  - **Explosive properties:** Not determined.
  - **Explosion limits:**

Lower:	3.5 Vol %
Upper:	15 Vol %

(Contd. on page 4)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 28.07.2020

**Trade name: Trans-Blot Transfer Pack, 0.2 µ Mini Nitrocellulose Membrane**

(Contd. of page 3)

· <b>Vapour pressure at 20 °C:</b>	59 hPa
· <b>Density at 20 °C:</b>	1.65 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not determined.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
dynamic:	Not determined.
kinematic:	Not determined.
· <b>Solvent content:</b>	
Organic solvents:	15.3 %
Water:	77.3 %
· <b>Solids content:</b>	7.4 %
· <b>9.2 Other information</b>	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:

##### 64-17-5 ethanol

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

##### 77-86-1 Tris(hydroxymethyl)aminomethane

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

##### 67-56-1 methanol

Oral	LD50	5,628 mg/kg (rat)
------	------	-------------------

(Contd. on page 5)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 28.07.2020

**Trade name: Trans-Blot Transfer Pack, 0.2 µ Mini Nitrocellulose Membrane**

(Contd. of page 4)

Dermal	LD50	20,000 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 (carcinogenicity, 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** 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

- |                                       |              |
|---------------------------------------|--------------|
| · <b>14.1 UN-Number</b>               |              |
| · <b>ADR, ADN, IMDG, IATA</b>         | Not Reguated |
| · <b>14.2 UN proper shipping name</b> |              |
| · <b>ADR</b>                          | Not Reguated |
|                                       | Not Reguated |
| · <b>ADN, IMDG, IATA</b>              | Not Reguated |

(Contd. on page 6)

HK

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 28.07.2020

**Trade name: Trans-Blot Transfer Pack, 0.2 µ Mini Nitrocellulose Membrane**

(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:** Not applicable.

**· 14.6 Special precautions for user** Not applicable.

**· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** 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 %
I	0.1-1
NK	10-<20

**· 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

(Contd. on page 7)

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

Printing date 03.08.2020

Revision: 28.07.2020

**Trade name: Trans-Blot Transfer Pack, 0.2 µ Mini Nitrocellulose Membrane**

(Contd. of page 6)

*CAS: Chemical Abstracts Service (division of the American Chemical Society)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 2: Flammable liquids – Category 2***\* Data compared to the previous version altered.**

HK

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

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

- **1.1 Product identifier**
- **Trade name:** *Precision Plus Protein Western-C Standards*
- **Article number:** 1610376, 1610376S, 1610399, 10008763, 10008764, 10007300, 10008760, 10022175
- **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 Pacific Ltd.  
Unit 1101 DCH Commercial Centre  
25 Westlands Road  
Quarry Bay  
Hong Kong  
phone: 852-2789-3300 fax: 852-2789-1290
- **Information department:** sales.hongkong@bio-rad.com
- **1.4 Emergency telephone number:** 852-2789-3300

### SECTION 2: Hazards identification

- **Emergency overview:**  
Colourless, Fluid, May be harmful if inhaled. Causes mild skin irritation.
- **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)



## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: Precision Plus Protein Western-C Standards

(Contd. of page 1)

**· Dangerous components:**

CAS: 56-81-5 EINECS: 200-289-5	glycerol	Acute Tox. 5, H303; Acute Tox. 5, H333	20-35%
CAS: 151-21-3 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:** 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.

(Contd. on page 3)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: Precision Plus Protein Western-C Standards

(Contd. of page 2)

- **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** Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves
- **Penetration time of glove material**  
The exact break through 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 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.

· Ignition temperature: 400 °C

(Contd. on page 4)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

**Trade name: Precision Plus Protein Western-C Standards**

(Contd. of page 3)

· <b>Decomposition temperature:</b>	Not determined.
· <b>Self igniting:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Not determined.
· <b>Explosion limits:</b>	
Lower:	0.9 Vol %
Upper:	Not determined.
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density:</b>	Not determined
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
dynamic:	Not determined.
kinematic:	Not determined.
· <b>Solvent content:</b>	
Organic solvents:	30.0 %
Water:	66.1 %
Solids content:	3.8 %
· <b>9.2 Other information</b>	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)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: Precision Plus Protein Western-C Standards

(Contd. of page 4)

· **LD/LC50 values that are relevant for classification:**

**56-81-5 glycerol**

Oral	LD50	4,090 mg/kg (mouse) 12,600 mg/kg (rat)
Dermal	LD50	10,000 mg/kg (Rabbit)
Inhalative	LC50/4 h	>30 mg/l (Rat)

**151-21-3 sodium dodecyl sulphate**

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 (carcinogenicity, 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)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: Precision Plus Protein Western-C Standards

(Contd. of page 5)

- **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 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 of Marpol and the IBC Code** 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.

HK  
(Contd. on page 7)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: **Precision Plus Protein Western-C 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.**

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

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

#### 1.1 Product identifier

Trade name: **StrepTactin-HRP Conjugate 0.3 ml**

Article number: 1610380, 1610380EDU, 1610381, 10009196, 10022135, 100022152, 10022188

#### 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 Pacific Ltd.  
Unit 1101 DCH Commercial Centre  
25 Westlands Road  
Quarry Bay  
Hong Kong

phone: 852-2789-3300 fax: 852-2789-1290

Information department: sales.hongkong@bio-rad.com

1.4 Emergency telephone number: 852-2789-3300

### SECTION 2: Hazards identification

#### Emergency overview:

Colourless, Liquid, May cause an allergic skin reaction.

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Sens. 1 H317 May cause an allergic skin reaction.

#### 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-determining components of labelling:

ProClin 300

#### Hazard statements

H317 May cause an allergic skin reaction.

#### Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves.

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

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see on this label).

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

(Contd. on page 2)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: StrepTactin-HRP Conjugate 0.3 ml

(Contd. of page 1)

- **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: 7558-79-4 EINECS: 231-448-7	disodium hydrogenorthophosphate Acute Tox. 3, H311 Acute Tox. 4, H332	0.1-1%
	ProClin 300 Consisting of: 55965-84-9 reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (3%) Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 Skin Corr. 1B, H314 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sens. 1, H317	0.025-<0.06%

- **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** Immediately remove any clothing soiled by the product.
- **After inhalation**  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact**  
Generally the product does not irritate the skin.  
Immediately wash with water and soap and rinse thoroughly.  
Immediately rinse with water.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Rinse mouth with water. Seek medical attention and appropriate follow-up.
- **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.

(Contd. on page 3)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: StrepTactin-HRP Conjugate 0.3 ml

(Contd. of page 2)

### 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:** 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:** 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).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **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.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **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 4)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

**Trade name: StrepTactin-HRP Conjugate 0.3 ml**

(Contd. of page 3)

- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
*Immediately remove all soiled and contaminated clothing*  
*Wash hands before breaks and at the end of work.*  
*Avoid contact with the 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 through 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:	Colourless
Odour:	Odourless
Odour threshold:	Not determined.

· **pH-value at 20 °C:** 6.8

##### · Change in condition

Melting point/freezing point:	0 °C
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:** 1.05 g/cm<sup>3</sup>

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

(Contd. on page 5)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: StrepTactin-HRP Conjugate 0.3 ml

(Contd. of page 4)

· <b>Solubility in / Miscibility with Water:</b>	Fully miscible
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b> dynamic at 20 °C: kinematic:	0.952 mPas Not determined.
· <b>Solvent content:</b> Water:	98.3 %
· <b>Solids content:</b>	1.6 %
· <b>9.2 Other information</b>	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**  
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, 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.

(Contd. on page 6)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

**Trade name: StrepTactin-HRP Conjugate 0.3 ml**

(Contd. of page 5)

- **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.

### SECTION 14: Transport information

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Number</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> </ul>  | Not Reguated   |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>ADN, IMDG, IATA</b></li> </ul>           | Not Reguated<br>Not Reguated<br>Not Reguated         |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transport hazard class(es)</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> <li>· <b>Class</b></li> </ul> | Not Reguated   |
| <ul style="list-style-type: none"> <li>· <b>14.4 Packing group</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | Not Reguated   |
| <ul style="list-style-type: none"> <li>· <b>14.5 Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> </ul>                                | No   |
| <ul style="list-style-type: none"> <li>· <b>14.6 Special precautions for user</b></li> </ul>  | Not applicable.                                      |
| <ul style="list-style-type: none"> <li>· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b></li> </ul>                        | Not applicable.                                      |
| <ul style="list-style-type: none"> <li>· <b>Transport/Additional information:</b></li> </ul>  | Not dangerous according to the above specifications. |
| <ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>   | Not Reguated   |

HK

(Contd. on page 7)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: **StrepTactin-HRP Conjugate 0.3 ml**

(Contd. of page 6)

#### 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:** 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. 3: Acute toxicity - dermal – Category 3  
Acute Tox. 4: Acute toxicity - inhalation – Category 4  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
Skin Sens. 1: Skin sensitisation – Category 1  
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
- **\* Data compared to the previous version altered.**

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

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

- **1.1 Product identifier**
- **Trade name:** *Trans-Blot Turbo Transfer Pack, 0.2 µ Midi Nitrocellulose Membrane*
- **Article number:** 1704159, 1704159EDU
- **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 Pacific Ltd.  
Unit 1101 DCH Commercial Centre  
25 Westlands Road  
Quarry Bay  
Hong Kong
- **Information department:** sales.hongkong@bio-rad.com
- **1.4 Emergency telephone number:** 852-2789-3300

phone: 852-2789-3300 fax: 852-2789-1290

### SECTION 2: Hazards identification

- **Emergency overview:**

White, Liquid on inert carrier material, No Data Available

- **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:**

CAS: 64-17-5	ethanol	Flam. Liq. 2, H225	10-20%
EINECS: 200-578-6			
	Nitrocellulose membrane	Flam. Sol. 1, H228	2.5-5%

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

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

Trade name: Trans-Blot Turbo Transfer Pack, 0.2 µ Midi Nitrocellulose Membrane

(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 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.
- **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.

### SECTION 8: Exposure controls/personal protection

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

(Contd. on page 3)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

**Trade name: Trans-Blot Turbo Transfer Pack, 0.2 µ Midi Nitrocellulose Membrane**

(Contd. of page 2)

**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 through 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 on inert carrier material

**Colour:** White

**Odour:** Alcohol-like

**Odour threshold:** Not determined.

**pH-value at 20 °C:** 8.9

**Change in condition**

**Melting point/freezing point:** undetermined

**Initial boiling point and boiling range:** 78 °C

**Flash point:** Not applicable  
Not determined.

**Flammability (solid, gaseous)** Not applicable.

**Ignition temperature:** 425 °C

**Decomposition temperature:** Not determined.

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

**Explosive properties:** Not determined.

**Explosion limits:**

**Lower:** 3.5 Vol %

**Upper:** 15 Vol %

**Vapour pressure at 20 °C:** 59 hPa

**Density at 20 °C:** 1.65 g/cm<sup>3</sup>

(Contd. on page 4)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

**Trade name: Trans-Blot Turbo Transfer Pack, 0.2 µ Midi Nitrocellulose Membrane**

(Contd. of page 3)

· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
dynamic:	Not determined.
kinematic:	Not determined.
· <b>Solvent content:</b>	
Organic solvents:	15.3 %
Water:	77.3 %
<b>Solids content:</b>	7.4 %
· <b>9.2 Other information</b>	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:

##### 64-17-5 ethanol

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

##### 77-86-1 Tris(hydroxymethyl)aminomethane

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

##### Nitrocellulose membrane

Oral	LD50	>5,000 mg/kg (rat)
------	------	--------------------

##### 67-56-1 methanol

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

(Contd. on page 5)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

**Trade name: Trans-Blot Turbo Transfer Pack, 0.2 µ Midi Nitrocellulose Membrane**

(Contd. of page 4)

- **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 (carcinogenicity, 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** 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

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Number</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> </ul>                                | <p>Not Reguated</p>                                   |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>ADN, IMDG, IATA</b></li> </ul> | <p>Not Reguated<br/>Not Reguated<br/>Not Reguated</p> |

(Contd. on page 6)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.08.2020

Revision: 29.07.2020

**Trade name: Trans-Blot Turbo Transfer Pack, 0.2 µ Midi Nitrocellulose Membrane**

(Contd. of page 5)

- |  |                 |
|--|-----------------|
| <b>· 14.3 Transport hazard class(es)</b>   |                 |
| <b>· ADR, ADN, IMDG, IATA</b>  |                 |
| <b>· Class</b>   | Not Reguated    |
| <b>· 14.4 Packing group</b>  |                 |
| <b>· ADR, IMDG, IATA</b>   | Not Reguated    |
| <b>· 14.5 Environmental hazards:</b>   | Not applicable. |
| <b>· 14.6 Special precautions for user</b>                                       | Not applicable. |
| <b>· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable. |
| <b>· UN "Model Regulation":</b>  | 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 %
I	0.1-1
NK	10-<20

- **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

(Contd. on page 7)

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

Printing date 03.08.2020

Revision: 29.07.2020

**Trade name: Trans-Blot Turbo Transfer Pack, 0.2 µ Midi Nitrocellulose Membrane**

(Contd. of page 6)

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Sol. 1: Flammable solids – Category 1

• **\* Data compared to the previous version altered.**

HK