

08/31/2020

Kit Components

Product code	Description	
171W4001M 10020730	Bio-Plex Pro TM TGF-β Assay 1x96-Well 3-Plex	
Components:		
10014641	Bio-Plex Sample Diluent	
9703888	Bio-Plex Standard Diluent	
10020566	Bio-Plex Pro™ Conjugated Magnetic Beads (20X)	
10020567	Bio-Plex Pro TM TGF-β Detection Antibodies (20X)	
10020565	Bio-Plex Pro TM TGF-β Standard 3-Plex	
9723892	Bio-Plex Assay Buffer	
171304500	Bio-Plex Wash Buffer A	
10014639	Bio-Plex Detection Antibody Diluent	
171304501	Streptavidin-PE	





Printing date 08/31/2020 Reviewed on 07/30/2020

1 Identification

- · Product identifier
- · Trade name: Bio-Plex Sample Diluent
- · Catalog or product number:

10014641, 9704423, 9703895, 171305043, 10022367, 10022619, 10022628, 10041561, 10041562, 12005851

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories (Canada) Ltd. 1329 Meyerside Drive Mississauga, Ontario L5T 1C9

Canada

phone: 1-800-268-0213 Fax: 1-888-913-9779

- · Information department: sales canada@bio-rad.com
- · Emergency telephone number: 1-800-424-6723 option 2

2 Hazard identification

 Classification of the substance or mixture The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable

3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components: Not applicable.
- · Additional information For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 2)





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Trade name: Bio-Plex Sample Diluent

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

5 Fire-fighting measures

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Dilute with plenty of water.
- Methods and material for containment and cleaning up:

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

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

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

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

(Contd. on page 3)





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Trade name: Bio-Plex Sample Diluent

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- · Exposure controls
- Personal protective equipment
- · General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed.
- 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

Information on basic physical and	chemical properties	
General Information		
Appearance: Form:	Lieuviel	
Color:	Liquid Colorless	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value at 20 °C:	7.4	
Change in condition		
Melting point/Melting range:	0 ℃	
Boiling point/Boiling range:	100 °C	
Flash point:	Not applicable	
,	Not determined.	
Flammability (solid, gaseous)	Not applicable.	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C:	23 hPa	
Density at 20 °C:	1 g/cm³	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible	

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Trade name: Bio-Plex Sample Diluent

	(Conto. or pag
· Viscosity: dynamic at 20 °C: kinematic:	0.952 mPas Not determined.
· Solvent content: Water:	98.7 %
Solids content: Other information	0.3 % No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

LD/LC50 values for nazardous	s components per	OSHA criteria:
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Proprietary Reagent D

Oral LD50 27 mg/kg (mouse) 27 mg/kg (rat)

- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritant effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

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Trade name: Bio-Plex Sample Diluent

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12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water.
- Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation Dispose of waste in accordance to applicable national, regional, or local regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number		
DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated	
UN proper shipping name		
DOT/TDG, ADN, IMDG, IATA	Not Regulated	
ADR	Not Regulated	
	Not Regulated	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA		
Class	Not Regulated	
Packing group		
DOT/TDG, ADR, IMDG, IATA	Not Regulated	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex II of MA	RPOL73/78	
and the IBC Code	Not applicable.	

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Trade name: Bio-Plex Sample Diluent

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• Transport/Additional information: Not dangerous according to the above specifications.

UN "Model Regulation": Not Regulated

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- · Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

· Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA	(Toxic	Substances	Control	Act):
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7732-18-5	water	ACTIVE
	Proprietary Reagent B	ACTIVE
	Proprietary Reagent C	ACTIVE
	Proprietary Reagent D	ACTIVE

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· National regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- · Date of the latest revision of the safety data sheet 08/31/2020 / -
- · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

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Safety Data Sheet according to HPR, Schedule 1

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Trade name: Bio-Plex Sample Diluent

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LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.

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1 Identification

- · Product identifier
- · Trade name: Bio-Plex Standard Diluent
- · Catalog or product number: 9703888, 9704424, 171305042, 171304080M, 10022368, 10022618, 12005853
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories (Canada) Ltd.

1329 Meyerside Drive Mississauga, Ontario

L5T 1C9

Canada

phone: 1-800-268-0213 Fax: 1-888-913-9779

- · Information department: sales canada@bio-rad.com
- · Emergency telephone number: 1-800-424-6723 option 2

2 Hazard identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable

3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components: Not applicable.
- · Additional information For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

(Contd. on page 2)





Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Standard Diluent

(Contd. of page 1)

5 Fire-fighting measures

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

6 Accidental release measures

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

Dilute with plenty of water.

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

· Methods and material for containment and cleaning up:

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

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

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

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. (Contd. on page 3)





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Trade name: Bio-Plex Standard Diluent

(Contd. of page 2)

- · 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

Information on basic physical and	chemical properties	
General Information		
Appearance:	Liquid	
Form: Color:	Liquid Colorless	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value at 20 °C:	7.4	
Change in condition		
Melting point/Melting range:	undetermined	
Boiling point/Boiling range:	100 ℃	
Flash point:	Not applicable	
	Not determined.	
Flammability (solid, gaseous)	Not applicable.	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C:	23 hPa	
Density at 20 °C:	1 g/cm³	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible	
Partition coefficient (n-octanol/wa	t er): Not determined.	
Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	

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Safety Data Sheet according to HPR, Schedule 1

Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Standard Diluent

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· Solvent content:

Water: 74.1 %

Solids content: 0.1 %

· Other information No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritant effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

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Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Standard Diluent

(Contd. of page 4)

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

13 Disposal considerations

- · Waste treatment methods
- · Recommendation Dispose of waste in accordance to applicable national, regional, or local regulations.
- · Uncleaned packagings:
- · **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information		
· UN-Number · DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated	
· UN proper shipping name · DOT/TDG, ADN, IMDG, IATA · ADR	Not Regulated Not Regulated Not Regulated	
· Transport hazard class(es)		
· DOT, ADR, ADN, IMDG, IATA · Class	Not Regulated	
· Packing group · DOT/TDG, ADR, IMDG, IATA	Not Regulated	
· Environmental hazards:	Not applicable.	
· Special precautions for user	Not applicable.	
· Transport in bulk according to Annex II of Ma and the IBC Code	ARPOL73/78 Not applicable.	
· UN "Model Regulation":	Not Regulated	

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

(Contd. on page 6)





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Trade name: Bio-Plex Standard Diluent

		(Contd. of page 5)
	313 (40CFR372.65):	
None of th	ne ingredients is listed.	
· TSCA (To	xic Substances Control Act):	
7732-18-5	water	ACTIVE
	Proprietary Reagent B	ACTIVE
	Proprietary Reagent C	ACTIVE
	Proprietary Reagent D	ACTIVE
· MAK (Ger	rman Maximum Workplace Concentration)	
None of th	ne ingredients is listed.	

· National regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- · Date of the latest revision of the safety data sheet 08/31/2020 / -
- · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.



Printing date 08/31/2020 Reviewed on 08/11/2020

1 Identification

- · Product identifier
- · Trade name: Bio-Plex Pro™ Conjugated Magnetic Beads (20X)
- · Catalog or product number:

10020566, 10020556, 10020557, 10020558, 10021202, 10022437, 10022421, 10022423, 10022423, 10022424, 10022425, 10022426, 10022427, 10022428, 10022429, 10022430, 10022431, 10022432, 10022433, 10022434, 10022435, 10023361, 10023321, 10023322, 10023323, 10023324, 10023325, 10023326, 10023327, 10023328, 10023329, 10023330, 10023331, 10023333, 10023334, 10023335, 10040192, 10040193, 10040194, 10040195, 10040196, 10040197, 10040198, 10040199, 10040200, 10040201, 10040202

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories (Canada) Ltd. 1329 Meyerside Drive

Mississauga, Ontario

L5T 1C9

Canada phone: 1-800-268-0213 Fax: 1-888-913-9779

- · Information department: sales_canada@bio-rad.com
- · Emergency telephone number: 1-800-424-6723 option 2

2 Hazard identification

· Classification of the substance or mixture

Skin Sensitizer - Category 1A H317 May cause an allergic skin reaction.

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



GHS07

- · Signal word Warning
- · 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.

CA





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Trade name: Bio-Plex Pro™ Conjugated Magnetic Beads (20X)

(Contd. of page 1)

3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components: Not applicable.
- · Additional information For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

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

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

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

6 Accidental release measures

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

Dilute with plenty of water.

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

Methods and material for containment and cleaning up:

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

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

CA



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Safety Data Sheet according to HPR, Schedule 1

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Trade name: Bio-Plex Pro™ Conjugated Magnetic Beads (20X)

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7 Handling and storage

- · Handling
- · Precautions for safe handling

No special measures required.

Ensure good ventilation/exhaust at the workplace.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

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

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

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

- · Breathing equipment: Not necessary if room is well-ventilated. Adequate ventilation 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

9 Physical and chemical properties

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

Form: Liquid
Color: Colorless
Odor: Odorless
Odor threshold: Not determined.

(Contd. on page 4)





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Trade name: Bio-Plex Pro™ Conjugated Magnetic Beads (20X)

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pH-value at 20 °C:	7.4
Change in condition Melting point/Melting range: Boiling point/Boiling range:	undetermined undetermined
Flash point:	Not applicable Not determined.
Flammability (solid, gaseous)	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Not determined.
Explosion limits: Lower: Upper:	Not determined. Not determined.
Vapor pressure at 20 °C:	23 hPa
Density: Relative density Vapor density Evaporation rate	Not determined Not determined. Not determined. Not determined.
Solubility in / Miscibility with Water:	Fully miscible
Partition coefficient (n-octanol/wat	ter): Not determined.
Viscosity: dynamic: kinematic:	Not determined. Not determined.
Solvent content: Water:	77.1 %
Solids content: Other information	12.1 % No further relevant information available.

10 Stability and reactivity

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

(Contd. on page 5)





Printing date 08/31/2020 Reviewed on 08/11/2020

Trade name: Bio-Plex Pro™ Conjugated Magnetic Beads (20X)

(Contd. of page 4)

· Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values for hazardous components per OSHA criteria:

Proprietary Reagent D

Oral LD50 27 mg/kg (mouse)

27 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritant effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories
- IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 6)





Printing date 08/31/2020 Reviewed on 08/11/2020

Trade name: Bio-Plex Pro™ Conjugated Magnetic Beads (20X)

(Contd. of page 5)

Dispose of waste in accordance to applicable national, regional, or local regulations.

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

Transport information		
· UN-Number · DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated	
UN proper shipping name DOT/TDG, ADN, IMDG, IATA ADR	Not Regulated Not Regulated Not Regulated	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA Class	Not Regulated	
Packing group DOT/TDG, ADR, IMDG, IATA	Not Regulated	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex II of MA and the IBC Code	NPOL73/78 Not applicable.	
UN "Model Regulation":	Not Regulated	

15 Regulatory information

Proprietary Reagent A

Proprietary Reagent D
Proprietary Reagent C

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA (Superfund Amendents and Reauthorization Act of 1986 USA)

· Section 3	302/304 (40CFR355.30 / 40CFR355.40):	
None of th	e ingredients is listed.	
· Section 3	313 (40CFR372.65):	
None of th	e ingredients is listed.	
· TSCA (To	ric Substances Control Act):	
7732-18-5	water	ACTIVE
	Proprietary Reagent K	ACTIVE

(Contd. on page 7)

ACTIVE

ACTIVE

ACTIVE





Printing date 08/31/2020 Reviewed on 08/11/2020

Trade name: Bio-Plex Pro™ Conjugated Magnetic Beads (20X)

		(Contd. of page 6)
	Proprietary Reagent L	Active
	Proprietary Reagent E	ACTIVE
· MAK (Gei	rman Maximum Workplace Concentration)	
None of th	ne ingredients is listed.	

· National regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· Date of the latest revision of the safety data sheet 08/31/2020 / -

Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transport Association

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.

CA





Printing date 08/31/2020 Reviewed on 08/13/2020

1 Identification

- · Product identifier
- · Trade name: Bio-Plex Pro™ TGF-β Detection Antibodies (20X)
- · Catalog or product number: 10020567, 10020559, 10020563, 10020564
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories (Canada) Ltd.

1329 Meyerside Drive Mississauga, Ontario

L5T 1C9

Canada phone: 1-800-268-0213 Fax: 1-888-913-9779

- · Information department: sales_canada@bio-rad.com
- Emergency telephone number: 1-800-424-6723 option 2

2 Hazard identification

· Classification of the substance or mixture

Skin Irritation - Category 2 H315 Causes skin irritation.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

Skin Sensitizer - Category 1 H317 May cause an allergic skin reaction.

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



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

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)

· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

· Precautionary statements

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

P280 Wear protective gloves/protective clothing/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.

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

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

(Contd. on page 2)





Printing date 08/31/2020 Reviewed on 08/13/2020

Trade name: Bio-Plex Pro™ TGF-β Detection Antibodies (20X)

(Contd. of page 1)

P501

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

3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components: Not applicable.
- · Additional information For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- · Description of first aid measures
- · General information No special measures required.
- · 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.

- · After eye contact Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Dilute with plenty of water.
- Methods and material for containment and cleaning up:

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

· Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

(Contd. on page 3)





Printing date 08/31/2020 Reviewed on 08/13/2020

Trade name: Bio-Plex Pro™ TGF-β Detection Antibodies (20X)

(Contd. of page 2)

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling

No special measures required.

Ensure good ventilation/exhaust at the workplace.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

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

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

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- · 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

Tightly sealed goggles.

(Contd. on page 4)

CA





Printing date 08/31/2020 Reviewed on 08/13/2020

Trade name: Bio-Plex Pro™ TGF-β Detection Antibodies (20X)

(Contd. of page 3)

artico	
erties	
chemical properties	
Odorless	
Not determined.	
7.4	
0 °C 100 °C	
17 7	
Not applicable.	
Not determined.	
Product is not selfigniting.	
Product does not present an explosion hazard.	
Not determined. Not determined.	
23 hPa	
Not determined	
Not determined.	
Not determined.	
Not determined.	
Fully miscible	
•	
,	
Not determined.	
Not determined.	
S 00 0/	
<20 % No further relevant information available.	
	Liquid Colorless Odorless Not determined. 7.4 0 °C 100 °C Not applicable Not applicable. Not determined. Product is not selfigniting. Product does not present an explosion hazard. Not determined.

10 Stability and reactivity

· Reactivity No further relevant information available.

(Contd. on page 5)



Page 5/7

Safety Data Sheet according to HPR, Schedule 1

Printing date 08/31/2020 Reviewed on 08/13/2020

Trade name: Bio-Plex Pro™ TGF-β Detection Antibodies (20X)

(Contd. of page 4)

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

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritant effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 6)





Printing date 08/31/2020 Reviewed on 08/13/2020

Trade name: Bio-Plex Pro™ TGF-β Detection Antibodies (20X)

(Contd. of page 5)

Dispose of waste in accordance to applicable national, regional, or local regulations.

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

4 Transport information		
· UN-Number · DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated	
· UN proper shipping name · DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated	
· Transport hazard class(es)		
· DOT, ADR, ADN, IMDG, IATA · Class	Not Regulated	
· Packing group · DOT/TDG, ADR, IMDG, IATA	Not Regulated	
· Environmental hazards: · Marine pollutant:	No	
· Special precautions for user	Not applicable.	
· Transport in bulk according to Annex II of MA and the IBC Code	ARPOL73/78 Not applicable.	
· UN "Model Regulation":	Not Regulated	

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

· Salety, He	atti and environmental regulations/legislation specific for the substance of mixture
· TSCA (To	xic Substances Control Act):
	Proprietary Reagent A
	Proprietary Reagent J23
	Proprietary Reagent C
	Proprietary Reagent D
7778-53-2	tripotassium phosphate
7732-18-5	water
· MAK (Ger	man Maximum Workplace Concentration)
None of th	e ingredients is listed.

· National regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

(Contd. on page 7)





Printing date 08/31/2020 Reviewed on 08/13/2020

Trade name: Bio-Plex Pro™ TGF-β Detection Antibodies (20X)

(Contd. of page 6)

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- · Date of the latest revision of the safety data sheet 08/31/2020 / -
- · Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.

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Printing date 08/31/2020 Reviewed on 08/15/2020

1 Identification

- · Product identifier
- · Trade name: Bio-Plex Pro™ TGF-β Standard 3-Plex
- · Catalog or product number: 10020565, 171X40501, 10020732, 171X40001
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories (Canada) Ltd.

1329 Meyerside Drive Mississauga, Ontario

L5T 1C9

Canada phone: 1-800-268-0213 Fax: 1-888-913-9779

- · Information department: sales_canada@bio-rad.com
- · Emergency telephone number: 1-800-424-6723 option 2

2 Hazard identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable

3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components:

Proprietary Reagent B

Acute Toxicity (Inhalation) - Category 4, H332

0.5-1.5% w/w *

- * Actual concentration ranges are withheld as a trade secret.
- · Additional information For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 2)





Reviewed on 08/15/2020 Printing date 08/31/2020

Trade name: Bio-Plex Pro™ TGF
β Standard 3-Plex

(Contd. of page 1)

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

5 Fire-fighting measures

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

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

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. (Contd. on page 3)





Printing date 08/31/2020 Reviewed on 08/15/2020

Trade name: Bio-Plex Pro™ TGF-β Standard 3-Plex

(Contd. of page 2)

- · 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

Physical and chemical prope	erties	
Information on basic physical and General Information Appearance:	chemical properties	
Form:	Solid	
Color:	White	
· Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value at 20 °C:	7.4	
Change in condition Melting point/Melting range: Boiling point/Boiling range:	undetermined undetermined	
Flash point:	Not applicable Not determined.	
Flammability (solid, gaseous)	Not determined.	
Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not applicable.	
Density:	Not determined	
Relative density	Not determined.	
· Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with Water:	Fully miscible	
Partition coefficient (n-octanol/wa	ter): Not determined.	
Viscosity:		
dynamic:	Not applicable.	
kinematic:	Not applicable.	

(Contd. on page 4)





Printing date 08/31/2020 Reviewed on 08/15/2020

Trade name: Bio-Plex Pro™ TGF-β Standard 3-Plex

(Contd. of page 3)

· Solvent content:

Solids content: 100.0 %

Other information
 No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values for hazardous components per OSHA criteria:

Proprietary Reagent A

Dermal LD50 >10,000 mg/kg (Rabbit)

Inhalative LC50/4 h >10.5 mg/l (rat)

- · Primary irritant effect:
- on the skin: No irritant effect.
- · on the eye: No irritant effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

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

(Contd. on page 5)





Printing date 08/31/2020 Reviewed on 08/15/2020

Trade name: Bio-Plex Pro™ TGF-β Standard 3-Plex

(Contd. of page 4)

- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

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

Transport information		
· UN-Number · DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated	
UN proper shipping name DOT/TDG, ADN, IMDG, IATA ADR	Not Regulated Not Regulated Not Regulated	
Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class	Not Regulated	
Packing group DOT/TDG, ADR, IMDG, IATA	Not Regulated	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex II of MA and the IBC Code	ARPOL73/78 Not applicable.	

(Contd. on page 6)





Printing date 08/31/2020 Reviewed on 08/15/2020

Trade name: Bio-Plex Pro™ TGF-β Standard 3-Plex

(Contd. of page 5)

· UN "Model Regulation":

Not Regulated

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· National regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- Date of the latest revision of the safety data sheet 08/31/2020 / -
- · Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

* Data compared to the previous version altered.

C 1



phone: 1-800-268-0213 Fax: 1-888-913-9779



Safety Data Sheet according to HPR, Schedule 1

Printing date 08/31/2020 Reviewed on 07/23/2020

1 Identification

- · Product identifier
- · Trade name: Bio-Plex Assay Buffer
- · Catalog or product number: 9723892, 9703892, 9704415, 171304100, 10014939, 10014940, 10014822, 10014823
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories (Canada) Ltd.

1329 Meyerside Drive Mississauga, Ontario

L5T 1C9 Canada

· Information department: sales canada@bio-rad.com

· Emergency telephone number: 1-800-424-6723 option 2

2 Hazard identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable

3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components: Not applicable.
- · Additional information For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

---- 2)



BIO-RAD

Safety Data Sheet according to HPR, Schedule 1

Printing date 08/31/2020 Reviewed on 07/23/2020

Trade name: Bio-Plex Assay Buffer

(Contd. of page 1)

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5 Fire-fighting measures

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Dilute with plenty of water.
- · Methods and material for containment and cleaning up:

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

· Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- Components with limit values that require monitoring at the workplace:

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

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- Personal protective equipment
- General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Not required.

(Contd. on page 3)





Printing date 08/31/2020 Reviewed on 07/23/2020

Trade name: Bio-Plex Assay Buffer

(Contd. of page 2)

- · 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

Information on basis abusined and	chamical proporties	-
Information on basic physical and General Information	chemical properties	
· Appearance:		
Form:	Liquid	
Color:	Colorless	
· Odor:	Odorless	
· Odor. · Odor threshold:	Not determined.	
pH-value at 20 °C:	7.4	
· Change in condition		
Melting point/Melting range:	0 ℃	
Boiling point/Boiling range:	100 ℃	
· Flash point:	Not applicable	
,	Not determined.	
Flammability (solid, gaseous)	Not applicable.	
Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure at 20 °C:	23 hPa	
· Density at 20 °C:	1.00579 g/cm³	
· Relative density	Not determined.	
· Vapor density	Not determined. Not determined.	
· Vapor density · Evaporation rate	Not determined.	
•	Not determined.	
Solubility in / Miscibility with	F. H. and a Mala	
Water:	Fully miscible	
· Partition coefficient (n-octanol/wa	ter): Not determined.	
· Viscosity:		
dynamic at 20 °C:	0.952 mPas	
kinematic:	Not determined.	

(Contd. on page 4)





Printing date 08/31/2020 Reviewed on 07/23/2020

Trade name: Bio-Plex Assay Buffer

(Contd. of page 3)

· Solvent content:

Water: 97.9 %

0.9 % Solids content:

· Other information No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values for hazardous components per OSHA criteria:

Proprietary Reagent D

Oral LD50 27 mg/kg (mouse)

27 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritant effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

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

(Contd. on page 5)





Printing date 08/31/2020 Reviewed on 07/23/2020

Trade name: Bio-Plex Assay Buffer

(Contd. of page 4)

- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes: Generally not hazardous for water.
- Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB**: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation Dispose of waste in accordance to applicable national, regional, or local regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

JN-Number	
DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated
UN proper shipping name	
DOT/TDG, ADN, IMDG, IATA	Not Regulated
ADR	Not Regulated
	Not Regulated
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA	
Class	Not Regulated
Packing group	
DOT/TDG, ADR, IMDG, IATA	Not Regulated
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MA	RPOL73/78
and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Not Regulated

(Contd. on page 6)





Printing date 08/31/2020 Reviewed on 07/23/2020

Trade name: Bio-Plex Assay Buffer

(Contd. of page 5)

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- · Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· National regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- · Date of the latest revision of the safety data sheet 08/31/2020 / -
- · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

· * Data compared to the previous version altered.

CA





Printing date 08/31/2020 Reviewed on 08/01/2020

1 Identification

- · Product identifier
- · Trade name: Bio-Plex Wash Buffer A
- · Catalog or product number: 171304500, 9703893, 9704416, 171304200, 97238963
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories (Canada) Ltd.

1329 Meyerside Drive Mississauga, Ontario

L5T 1C9

Canada phone: 1-800-268-0213 Fax: 1-888-913-9779

- · Information department: sales_canada@bio-rad.com
- Emergency telephone number: 1-800-424-6723 option 2

2 Hazard identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable

3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components: Not applicable.
- · Additional information For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

---- 2)



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Safety Data Sheet according to HPR, Schedule 1

Printing date 08/31/2020 Reviewed on 08/01/2020

Trade name: Bio-Plex Wash Buffer A

(Contd. of page 1)

5 Fire-fighting measures

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Dilute with plenty of water.
- · Methods and material for containment and cleaning up:

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

· Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

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

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Not required.

(Contd. on page 3)





Printing date 08/31/2020 Reviewed on 08/01/2020

Trade name: Bio-Plex Wash Buffer A

(Contd. of page 2)

- · 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

Information on basic physical and	chemical properties	
General Information		
Appearance:		
Form:	Liquid	
Color:	Colorless	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value at 20 °C:	7.4	
Change in condition		
Melting point/Melting range:	0 °C	
Boiling point/Boiling range:	100 °C	
Flash point:	Not applicable	
	Not determined.	
Flammability (solid, gaseous)	Not applicable.	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C:	23 hPa	
Density at 20 °C:	1 g/cm³	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible	
Partition coefficient (n-octanol/wa	•	
Viscosity:	- -	
dynamic at 20 °C:	0.952 mPas	
kinematic:	Not determined.	





Printing date 08/31/2020 Reviewed on 08/01/2020

Trade name: Bio-Plex Wash Buffer A

(Contd. of page 3)

· Solvent content:

Water: 98.8 %

Solids content: 0.9 %

· Other information No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values for hazardous components per OSHA criteria:

Proprietary Reagent D

Oral LD50 27 mg/kg (mouse) 27 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritant effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

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

(Contd. on page 5)





Printing date 08/31/2020 Reviewed on 08/01/2020

Trade name: Bio-Plex Wash Buffer A

(Contd. of page 4)

- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes: Generally not hazardous for water.
- Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB**: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

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

Not Regulated Not Regulated Not Regulated Not Regulated Not Regulated Not Regulated
Not Regulated Not Regulated Not Regulated
Not Regulated Not Regulated Not Regulated
Not Regulated Not Regulated
Not Regulated
<u> </u>
<u> </u>
<u> </u>
Not Regulated
Not Regulated
No
Not applicable.
Not applicable.
Not dangerous according to the above specifications.

c.. page c





Printing date 08/31/2020 Reviewed on 08/01/2020

Trade name: Bio-Plex Wash Buffer A

(Contd. of page 5)

· UN "Model Regulation":

Not Regulated

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

· Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· National regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- Date of the latest revision of the safety data sheet 08/31/2020 / -
- · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.

CA



phone: 1-800-268-0213 Fax: 1-888-913-9779



Safety Data Sheet according to HPR, Schedule 1

Printing date 08/31/2020 Reviewed on 07/30/2020

1 Identification

- · Product identifier
- · Trade name: Bio-Plex Detection Antibody Diluent
- · Catalog or product number: 10014639, 9703894, 9704417, 10014651, 10014650, 9723894, 10014640
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories (Canada) Ltd.

1329 Meyerside Drive Mississauga, Ontario

L5T 1C9 Canada

· Information department: sales canada@bio-rad.com

· Emergency telephone number: 1-800-424-6723 option 2

2 Hazard identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable

3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components: Not applicable.
- · Additional information For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.





Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Detection Antibody Diluent

(Contd. of page 1)

5 Fire-fighting measures

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

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

· Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

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

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- Personal protective equipment
- General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Not required.

(Contd. on page 3)





Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Detection Antibody Diluent

(Contd. of page 2)

- · 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

9 Physical and chemical properties				
 Information on basic physical and General Information Appearance: 	chemical properties			
Form:	Liquid			
Color:	Colorless			
· Odor:	Odorless			
· Odor threshold:	Not determined.			
· pH-value at 20 °C:	7.4			
· Change in condition				
Melting point/Melting range:	undetermined			
Boiling point/Boiling range:	100 °C			
· Flash point:	Not applicable			
p	Not determined.			
· Flammability (solid, gaseous)	Not applicable.			
· Decomposition temperature:	Not determined.			
· Auto igniting:	Product is not selfigniting.			
· Danger of explosion:	Not determined.			
· Explosion limits:				
Lower:	Not determined.			
Upper:	Not determined.			
· Vapor pressure at 20 °C:	23 hPa			
· Density at 20 °C:	1 g/cm³			
· Relative density	Not determined.			
· Vapor density	Not determined.			
Evaporation rate	Not determined.			
· Solubility in / Miscibility with				
Water:	Fully miscible			
· Partition coefficient (n-octanol/wa	t er): Not determined.			
· Viscosity:				
dynamic:	Not determined.			
kinematic:	Not determined.			
	(Contd. on page			

(Contd. on page 4)





Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Detection Antibody Diluent

(Contd. of page 3)

· Solvent content:

Water: 93.8 %

Solids content: 0.9 %

· Other information No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values for hazardous components per OSHA criteria:

Proprietary Reagent D

Oral LD50 27 mg/kg (mouse)

27 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritant effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

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

(Contd. on page 5)





Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Detection Antibody Diluent

(Contd. of page 4)

- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

JN-Number	N . D
DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated
UN proper shipping name	
DOT/TDG, ADN, IMDG, IATA	Not Regulated
ADR	Not Regulated
	Not Regulated
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA	
Class	Not Regulated
Packing group	
DOT/TDG, ADR, IMDG, IATA	Not Regulated
Environmental hazards:	
Environmental nazaros: Marine pollutant:	No
•	
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MA	ARPOL73/78
and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.





Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Detection Antibody Diluent

(Contd. of page 5)

· UN "Model Regulation":

Not Regulated

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

· Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

•	,	
7732-18-5	water	ACTIVE
	Proprietary Reagent A	ACTIVE
	Proprietary Reagent B	ACTIVE
	Proprietary Reagent C	ACTIVE
	Proprietary Reagent D	ACTIVE
	Proprietary Reagent E	ACTIVE

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· National regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- · Date of the latest revision of the safety data sheet 08/31/2020 / -
- · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

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Safety Data Sheet according to HPR, Schedule 1

Reviewed on 07/30/2020 Printing date 08/31/2020

Trade name: Bio-Plex Detection Antibody Diluent

(Contd. of page 6)

LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

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

* Data compared to the previous version altered.





Printing date 08/31/2020 Reviewed on 07/30/2020

1 Identification

- · Product identifier
- · Trade name: Streptavidin-PE
- · Catalog or product number: 171304501, 9704418, 9703887, 9703897, 10031861
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories (Canada) Ltd.

1329 Meyerside Drive Mississauga, Ontario

L5T 1C9

Canada phone: 1-800-268-0213 Fax: 1-888-913-9779

- · Information department: sales canada@bio-rad.com
- · Emergency telephone number: 1-800-424-6723 option 2

2 Hazard identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable

3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components: Not applicable.
- · Additional information For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.



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Safety Data Sheet according to HPR, Schedule 1

Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Streptavidin-PE

(Contd. of page 1)

5 Fire-fighting measures

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up:

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

· Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

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

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Not required.

(Contd. on page 3)





Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Streptavidin-PE

(Contd. of page 2)

- · 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

9 Physical and chemical prope	erties en la companya de la companya	
· Information on basic physical and · General Information · Appearance:	l chemical properties	
Form:	Liquid	
Color:	Colorless	
· Odor:	Odorless	
· Odor threshold:	Not determined.	
· pH-value at 20 °C:	7.4	
· Change in condition Melting point/Melting range: Boiling point/Boiling range:	0 °C 100 °C	
· Flash point:	Not applicable Not determined.	
· Flammability (solid, gaseous)	Not applicable.	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Not determined.	
· Explosion limits: Lower: Upper:	Not determined. Not determined.	
· Vapor pressure at 20 °C:	23 hPa	
· Density at 20 °C:	1 g/cm³	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with Water:	Fully miscible	_
· Partition coefficient (n-octanol/wa	ter): Not determined.	
· Viscosity: dynamic at 20 °C: kinematic:	0.952 mPas Not determined.	
	(Contd. on n	

(Contd. on page 4)





Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Streptavidin-PE

(Contd. of page 3)

· Solvent content:	
Water:	

Solids content: 0.9 %

· Other information No further relevant information available.

98.9 %

10 Stability and reactivity

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

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritant effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water.

(Contd. on page 5)





Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Streptavidin-PE

(Contd. of page 4)

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

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

Transport information	
JN-Number DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated
UN proper shipping name DOT/TDG, ADN, IMDG, IATA ADR	Not Regulated Not Regulated Not Regulated
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA Class	Not Regulated
Packing group DOT/TDG, ADR, IMDG, IATA	Not Regulated
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MA and the IBC Code	RPOL73/78 Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Not Regulated

(Contd. on page 6)





Printing date 08/31/2020 Reviewed on 07/30/2020

Trade name: Streptavidin-PE

(Contd. of page 5)

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CA