

09/01/2020

Kit Components

Product code	Description
171K1001M	Bio-Plex Pro TM Rat Cytokine Group I Panel Kit
171K1002M	
171K7001M	
Z80	
12005641	

Components:

Bio-Plex Pro Rat Standard
Bio-Plex Pro Coupled Magnetic Beads (Rat)
Bio-Plex Pro Rat Detection Antibodies
Streptavidin-PE
Bio-Plex Assay Buffer
Bio-Plex Standard Diluent
Bio-Plex Pro Assays 10X Wash Buffer
Bio-Plex Sample Diluent
Mouse HP DAD





Printing date 09/01/2020 Reviewed on 09/01/2020

1 Identification

- · Product identifier
- · Trade name: Bio-Plex Pro Rat Standard
- · Catalog or product number: 171NZ0001, 171NZ0501, 10021231, 12005501, 10021230
- · 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.

· Listi	ng of dangerous and non-hazardous components:	
	Proprietary Reagent J23	1-5% w/w *
	Acute Toxicity (Dermal) – Category 3, H311 Acute Toxicity (Inhalation) - Category 4, H332	
	Proprietary Reagent B	0.1-1% w/w *
	Acute Toxicity (Inhalation) - Category 4, H332	

^{*} 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 eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.

(Contd. on page 2)





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Trade name: Bio-Plex Pro Rat Standard

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- · 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: 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
- 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.

(Contd. on page 3)





Printing date 09/01/2020 Reviewed on 09/01/2020

Trade name: Bio-Plex Pro Rat Standard

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- · Exposure controls
- Personal protective equipment
- · General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed.
- · 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:	Solid	
Color:	White	
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:	undetermined	
Flash point:	Not applicable	
a.e p .e	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:	Soluble	

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Printing date 09/01/2020 Reviewed on 09/01/2020

Trade name: Bio-Plex Pro Rat Standard

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· Viscosity:

dynamic: Not applicable. kinematic: Not applicable.

· 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.

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Trade name: Bio-Plex Pro Rat Standard

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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:

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 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:	Not applicable.	
Special precautions for user	Not applicable.	





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Trade name: Bio-Plex Pro Rat Standard

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- Transport in bulk according to Annex II of MARPOL73/78
 and the IBC Code
 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.

· Section 313 (40CFR372.65):

None of the ingredients is listed.

• 1	SCA	OXIC	Substances	Control	ACt):
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Proprietary Reagent J	ACTIVE
Proprietary Reagent C	ACTIVE
Proprietary Reagent J23	ACTIVE
Proprietary Reagent A	ACTIVE
Proprietary Reagent B	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 09/01/2020 / -
- · Abbreviations and acronvms:

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

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Safety Data Sheet according to HPR, Schedule 1

Printing date 09/01/2020 Reviewed on 09/01/2020

Trade name: Bio-Plex Pro Rat Standard

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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





Printing date 09/01/2020 Reviewed on 09/01/2020

1 Identification

- · Product identifier
- · Trade name: Bio-Plex Pro Coupled Magnetic Beads (Rat)
- · Catalog or product number:

 $10021236,\ 10020941,\ 10020942,\ 10020943,\ 10020944,\ 10020945,\ 10020946,\ 10020947,\ 10020948,\ 10020949,\ 10020950,\ 10020951,\ 10020952,\ 10020953,\ 10020954,\ 10020955,\ 10020956,\ 10020957,\ 10020958,\ 10020959,\ 10020959,\ 10020960,\ 10020961,\ 10020962,\ 10020963,\ 10020964,\ 10020965,\ 10020966,\ 10020967,\ 10020968,\ 10020969,\ 10020970,\ 10021237,\ 10023683,\ 10020881,\ 10020882,\ 10020883,\ 10020884,\ 10020885,\ 10020886,\ 10020887,\ 10020888,\ 10020889,\ 10020899,\ 10020900,\ 10020901,\ 10020902,\ 10020904,\ 10020905,\ 10020906,\ 10020907,\ 10020908,\ 10020909,\ 10020910,\ 10021106,\ 10022488,\ 10021105$

- · 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 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



GHS07

- · 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

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).

(Contd. on page 2)





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Trade name: Bio-Plex Pro Coupled Magnetic Beads (Rat)

(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 a	langerous and non-hazardous components:	
57-50-1	sucrose, pure	5-10% w/w *
26628-22-8	sodium azide Acute Toxicity (Oral) - Category 2, H300	0.025- <i>≤</i> 0.1% w/w *
55965-84-9	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) Acute Toxicity (Oral) - Category 3, H301; Acute Toxicity (Dermal) – Category 2, H310; Acute Toxicity (Inhalation) - Category 2, H330 Skin Corrosion - Category 1C, H314; Serious Eye Damage - Category 1, H318 Skin Sensitizer - Category 1A, H317	0.06-<0.1% w/w *

^{*} Actual concentration ranges are withheld as a trade secret.

4 First-aid measures

- · Description of first aid measures
- · General information Immediately remove any clothing soiled by the product.
- · After inhalation

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact

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: Wear self-contained respiratory protective device.

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





Printing date 09/01/2020 Reviewed on 09/01/2020

Trade name: Bio-Plex Pro Coupled Magnetic Beads (Rat)

(Contd. of page 2)

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).

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.

7 Handling and storage

- · Handling
- · Precautions for safe handling

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:

57-50-1 sucrose, pure

EL TWA: 10* 3** mg/m³

*total dust; **respirable fraction

EV TWA: 10 mg/m³

total dust

26628-22-8 sodium azide

EL Ceiling: 0.29* mg/m³, 0.11** ppm

*sodium azide; **hydrazoic acid vapour

EV Ceiling: 0.26 mg/m³, 0.1 ppm

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

(Contd. on page 4)





Printing date 09/01/2020 Reviewed on 09/01/2020

Trade name: Bio-Plex Pro Coupled Magnetic Beads (Rat)

(Contd. of page 3)

- · Exposure controls
- · Personal protective equipment
- General protective and hygienic measures

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

- · Breathing equipment: Not necessary if room is well-ventilated. 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 prope	rties
 Information on basic physical and General Information Appearance: Form: Color: Odor threshold: 	Chemical properties Suspension Colorless Odorless Not determined.
· pH-value at 20 °C:	7.4
· Change in condition Melting point/Melting range: Boiling point/Boiling range:	undetermined 100°C
· Flash point:	Not applicable Not determined.
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	150 ℃
· 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.
	(Contd. on page 5





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Trade name: Bio-Plex Pro Coupled Magnetic Beads (Rat)

		(Contd. of page 4
· Solubility in / Miscibility wit	h	
Water:	Partly soluble	
· Partition coefficient (n-octa	nol/water): Not determined.	
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Water:	53.2 %	
Solids content:	26.5 %	
· 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/L	.C50 values fo	or hazardous components per OSHA criteria:
Γ	50-7	0-4 D-glucitol	
ľ	Oral	LD50	15,900 mg/kg (rat)
Ī	1185	5-53-1 Tris-HC	CI CONTRACTOR OF THE CONTRACTO
ſ	Oral	LD50	5,900 mg/kg (rat)
ľ	26628-22-8 sodium azide		
Γ	Oral		27 mg/kg (Rat)
			27 mg/kg (mouse)
-	D'		

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No 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

(Contd. on page 6)





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Trade name: Bio-Plex Pro Coupled Magnetic Beads (Rat)

(Contd. of page 5)

- · 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 Dispose of waste in accordance to applicable national, regional, or local regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

· UN-Number		
· ON-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	

(Contd. on page 7)





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Trade name: Bio-Plex Pro Coupled Magnetic Beads (Rat)

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		(Oorita. or page o)
· 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	RPOL73/78 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.

· Section 313 (40CFR372.65):

None of the ingredients is listed.

None of the Ingredients is listed.			
· TSCA (Toxic Substances Control Act):			
7732-18-5	water	ACTIVE	
57-50-1	sucrose, pure	ACTIVE	
50-70-4	D-glucitol	ACTIVE	
1185-53-1	Tris-HCl	ACTIVE	
7647-14-5	sodium chloride	ACTIVE	
9048-46-8	Bovine Serum Albumin	ACTIVE	
1310-73-2	sodium hydroxide	ACTIVE	
9005-64-5	Polysorbate 20	ACTIVE	
9011-18-1	Dextran Sulfate	ACTIVE	
10049-21-5	Sodium Phosphate Monobasic, Monohydrate	ACTIVE	
26628-22-8	sodium azide	ACTIVE	
MAY (0 M : W + 1 O + d :)			

· 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.

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Safety Data Sheet according to HPR, Schedule 1

Printing date 09/01/2020 Reviewed on 09/01/2020

Trade name: Bio-Plex Pro Coupled Magnetic Beads (Rat)

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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 09/01/2020 / -
- · 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 09/01/2020 Reviewed on 09/01/2020

1 Identification

- · Product identifier
- · Trade name: Bio-Plex Pro Rat Detection Antibodies
- · Catalog or product number:

 $10021239,\ 10020971,\ 10020972,\ 10020973,\ 10020974,\ 10020975,\ 10020976,\ 10020977,\ 10020978,\ 10020979,\ 10020980,\ 10020981,\ 10020982,\ 10020983,\ 10020984,\ 10020985,\ 10020986,\ 10020987,\ 10020988,\ 10020989,\ 10020999,$

- · 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:				
7558-79-4	disodium hydrogenorthophosphate	0.1-1% w/w *		
	Acute Toxicity (Dermal) – Category 3, H311 Acute Toxicity (Inhalation) - Category 4, H332			
	Proprietary Reagent B	0.1-1% w/w *		
	Acute Toxicity (Inhalation) - Category 4, H332			

^{*} Actual concentration ranges are withheld as a trade secret.

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

- C

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



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Safety Data Sheet according to HPR, Schedule 1

Printing date 09/01/2020 Reviewed on 09/01/2020

Trade name: Bio-Plex Pro Rat Detection Antibodies

(Contd. of page 1)

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.

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

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.

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Printing date 09/01/2020 Reviewed on 09/01/2020

Trade name: Bio-Plex Pro Rat Detection Antibodies

(Contd. of page 2)

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.
- · 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 	chemical properties		
· 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: Boiling point/Boiling range:	undetermined 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		

(Contd. on page 4)





Printing date 09/01/2020 Reviewed on 09/01/2020

Trade name: Bio-Plex Pro Rat Detection Antibodies

		(Contd. of page
· Density:	Not determined	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible	
· Partition coefficient (n-octanol/wa	ater): Not determined.	
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Water:	91.7 %	
Solids content:	6.1 %	
· 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:

· LD/LC50	· LD/LC50 values for hazardous components per OSHA criteria:				
Proprietal	Proprietary Reagent A				
Dermal	LD50	>10,000 mg/kg (Rabbit)			
Inhalative	nhalative LC50/4 h >10.5 mg/l (rat)				
Proprietal	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.

(Contd. on page 5)





Printing date 09/01/2020 Reviewed on 09/01/2020

Trade name: Bio-Plex Pro Rat Detection Antibodies

(Contd. of page 4)

· Additional toxicological information:

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

- · 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 Dispose of waste in accordance to applicable national, regional, or local regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

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· DOT/TDG, ADR, ADN, IMDG, IATA Not Regulated

· UN proper shipping name

DOT/TDG, ADN, IMDG, IATA

Not Regulated

· ADR Not Regulated
Not Regulated

(Contd. on page 6)





Printing date 09/01/2020 Reviewed on 09/01/2020

Trade name: Bio-Plex Pro Rat Detection Antibodies

		(Contd. of page 5)
· 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 M 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.

· Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):			
7732-18-5 water	ACTIVE		
Proprietary Reagent A	ACTIVE		
7558-79-4 disodium hydrogenorthophosphate	ACTIVE		
Proprietary Reagent B	ACTIVE		
Proprietary Reagent C	ACTIVE		
Proprietary Reagent D	ACTIVE		
Proprietary Component A, inorganic salt	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.

(Contd. on page 7)





Printing date 09/01/2020 Reviewed on 09/01/2020

Trade name: Bio-Plex Pro Rat Detection Antibodies

(Contd. of page 6)

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 09/01/2020 / -
- · 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.

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Printing date 09/01/2020 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 09/01/2020 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 09/01/2020 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

Information on basic physical and	chemical properties	
General Information	The property of the second sec	
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	
<u> </u>		
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	
<u> </u>		
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.	

(Contd. on page 4)





Printing date 09/01/2020 Reviewed on 07/30/2020

Trade name: Streptavidin-PE

(Contd. of page 3)

•	Solv	ent	con	tent:
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Water: 98.9 %

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:
- · 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 09/01/2020 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.

UN-Number DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated
JN 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 09/01/2020 Reviewed on 07/30/2020

Trade name: Streptavidin-PE

(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.

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· ISCA (TOXIC SUBST	ances Control Act):	
7732-18-5 water		ACTIVE
Proprieta	ary Reagent A	ACTIVE
Proprieta	ary Reagent B	ACTIVE
Proprieta	ary Reagent C	ACTIVE
Proprieta	ary 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 09/01/2020 / -
- 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.

CA



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



Safety Data Sheet according to HPR, Schedule 1

Printing date 09/01/2020 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.

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Safety Data Sheet according to HPR, Schedule 1

Printing date 09/01/2020 Reviewed on 07/23/2020

Trade name: Bio-Plex Assay Buffer

(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 09/01/2020 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 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 ℃	
Flash point:	Not applicable	
. iden pema	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.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible	
Partition coefficient (n-octanol/wa	ter): Not determined.	
Viscosity:		
dynamic at 20 °C:	0.952 mPas	
kinematic:	Not determined.	





Printing date 09/01/2020 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 09/01/2020 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	Mad Danielada I
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
· · · · ·	Not Negulated
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of I	MARPOL73/78
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 09/01/2020 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 09/01/2020 / -
- · 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 09/01/2020 Reviewed on 07/30/2020

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

· 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)

- CA





Printing date 09/01/2020 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)





Printing date 09/01/2020 Reviewed on 07/30/2020

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	chemical properties	
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:	undetermined	
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	er): Not determined.	
Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	



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Safety Data Sheet according to HPR, Schedule 1

Printing date 09/01/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Standard Diluent

(Contd. of page 3)

· 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.

(Contd. on page 5)





Printing date 09/01/2020 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)





Reviewed on 07/30/2020 Printing date 09/01/2020

Trade name: Bio-Plex Standard Diluent

		(Contd. of page 5)
· Section 3	313 (40CFR372.65):	
None of the	e 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	man Maximum Workplace Concentration)	
None of the	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

- · 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 09/01/2020 / -
- · 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 09/01/2020 Reviewed on 07/30/2020

1 Identification

- · Product identifier
- · Trade name: Bio-Plex Pro Assays 10X Wash Buffer
- · Catalog or product number: 171304040, 12006121, 12005850
- · 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	f dangerous and	' non-hazardous	components:
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Proprietary Reagent B	0.5-1.5% w/w *
Acute Toxicity (Inhalation) - Category 4, H332	
Proprietary Reagent D	0.25-<1% w/w *
Acute Toxicity (Oral) - Category 2, H300; Acute Toxicity (Dermal) – Category 3, H311; Acute Toxicity (Inhalation) - Category 3, H331	

^{*} 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 eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.

(Contd. on page 2)





Printing date 09/01/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Pro Assays 10X Wash Buffer

(Contd. of page 1)

- · 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:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

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.

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.

(Contd. on page 3)





Printing date 09/01/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Pro Assays 10X Wash Buffer

(Contd. of page 2)

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

Proprietary Reagent D

EL Ceiling: 0.29** mg/m³, 0.11* ppm

*sodium azide; **hydrazoic acid vapour

EV Ceiling: 0.26 mg/m³, 0.1 ppm

- · 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.
- · 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

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· Informat	ion on l	basic pl	hysical	and o	chemic	cal prope	erties
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· 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: undetermined 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

(Contd. on page 4)





Printing date 09/01/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Pro Assays 10X Wash Buffer

		(Contd. of page 3)
· Density:	Not determined	
· Relative density	Not determined.	
· Vapor density	Not determined.	
Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible	
· Partition coefficient (n-octanol/wate	er): Not determined.	
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Water:	88.4 %	
Solids content:	8.8 %	
· 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:
Proprieta	ry Reagen	nt A
Dermal	LD50	>10,000 mg/kg (Rabbit)
Inhalative	LC50/4 h	>10.5 mg/l (rat)
Proprieta	ry Reagen	nt 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.

(Contd. on page 5)





Printing date 09/01/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Pro Assays 10X Wash Buffer

(Contd. of page 4)

Additional toxicological information:

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

- · 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 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

· DOT/TDG, ADR, ADN, IMDG, IATA Not Regulated

· UN proper shipping name

· **DOT/TDG, ADN, IMDG, IATA**Not Regulated

· **ADR**Not Regulated
Not Regulated

(Contd. on page 6)





Printing date 09/01/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Pro Assays 10X Wash Buffer

	(Contd. of page 5)
· 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 MARPOL7 and the IBC Code 	3/78 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.

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

(Contd. on page 7)



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Safety Data Sheet according to HPR, Schedule 1

Printing date 09/01/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Pro Assays 10X Wash Buffer

(Contd. of page 6)

· Date of the latest revision of the safety data sheet 09/01/2020 / -

· 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.





Printing date 09/01/2020 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)





Printing date 09/01/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Sample Diluent

(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: 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)





Printing date 09/01/2020 Reviewed on 07/30/2020

Trade name: Bio-Plex Sample Diluent

(Contd. of page 2)

- · 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:	Liquid	
Color:	Colorless	
Odor:	Odorless Not de torreine de	
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	
. iden pema	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	

(Contd. on page 4)





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Trade name: Bio-Plex Sample Diluent

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	(Conta. of page .
· 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 hazardous components per OSHA crit 	erıa:
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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

(Contd. of page 4)

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.

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	RPOL73/78 Not applicable.	

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Trade name: Bio-Plex Sample Diluent

(Contd. of page 5)

• 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 09/01/2020 / -
- · 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: Mouse HP DAD
- · Catalog or product number: 12002108, 12002109, 12005854
- · 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

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

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

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)



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Safety Data Sheet according to HPR, Schedule 1

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Trade name: Mouse HP DAD

(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

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.
- · Breathing equipment: Not required.
- · Protection of hands: Protective gloves.

(Contd. on page 3)





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Trade name: Mouse HP DAD

(Contd. of page 2)

- · 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:	Amber	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value at 20 °C:	7.2	
Change in condition		
Melting point/Melting range:	undetermined	
Boiling point/Boiling range:	100 °C	
Flash point:	Not applicable	
p e	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:	Not determined	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Not determined.	
Partition coefficient (n-octanol/wa	ter): Not determined.	
Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
Solvent content:		
Water:	73.7 %	





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Trade name: Mouse HP DAD

(Contd. of page 3)

Solids content:

• Other information No further relevant information available.

1.0 %

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:

26628-22-8 sodium azide

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

- · 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.

(Contd. on page 5)





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Trade name: Mouse HP DAD

(Contd. of page 4)

- · 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 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		
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	

(Contd. on page 6)





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Trade name: Mouse HP DAD

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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		ACTIVE
		ACTIVE
9005-64-5	Polysorbate 20	ACTIVE
7558-79-4	disodium hydrogenorthophosphate	ACTIVE
26628-22-8	sodium azide	ACTIVE
7558-80-7	Monosodium phosphate	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.

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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.