



06.04.2018

### Kit components

Product code	Description
<b>12007283</b>	<b>Bio-Plex® Pro™ Human Cytokine Screening Panel, 48-Plex Kit</b>
<b>12007975</b>	<b>Bio-Plex® Pro™ Human Immuno-Oncology Panel, 20-Plex</b>

#### Components:

9703888	Bio-Plex® Standard Diluent
10014641	Bio-Plex® Sample Diluent
9723892	Bio-Plex® Assay Buffer
171304040	Bio-Plex Pro™ Assays 10X Wash Buffer
10032400	Bio-Plex® Detection Antibody Diluent HB
171304501	Streptavidin-PE
12007294	Bio-Plex® Pro™ Human Cytokine Screening Panel, Bead Blend 48-Plex
12007293	Bio-Plex® Pro™ Human Cytokine Screening Panel, Detection Antibodies Blend 48-Plex
12007919	Bio-Plex® Pro™ Human Cytokine Screening Panel, Standards
12007298	Bio-Plex® Pro™ Human Cytokine Screening Panel, Control

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 20.09.2017

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

- **1.1 Product identifier**
- **Trade name:** Bio-Plex® Standard Diluent
- **Article number:** 9703888, 9704424, 171305042, 171304080M, 10022368, 10022618, 10022627, 12005853
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Bio-Rad Laboratories G.m.b.H.  
Heidemann Strasse 164  
D-80939 München  
Germany  
phone: 0049-89-31884-0 fax: 0049-89-31884-100
- **Information department:** TechsupportLSG.CE@bio-rad.com, CSD\_Techsupport@bio-rad.com, qcfragen@bio-rad.com
- **1.4 Emergency telephone number:** 0049-89-31884-0

### SECTION 2: Hazards identification

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

### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- **Dangerous components:** Void
- **Additional information** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

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

(Contd. on page 2)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 20.09.2017

Trade name: Bio-Plex® Standard Diluent

(Contd. of page 1)

**4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**SECTION 5: Firefighting measures**

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

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:**
  - Dilute with plenty of water.
  - Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
  - See Section 7 for information on safe handling
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

**SECTION 7: Handling and storage**

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

**SECTION 8: Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 3)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 20.09.2017

Trade name: **Bio-Plex® Standard Diluent**

(Contd. of page 2)

- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures should be adhered to when handling chemicals.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

### SECTION 9: Physical and chemical properties

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

Form:	Fluid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Not determined.
- **pH-value at 20 °C:** 7.4
- **Change in condition**

Melting point/freezing point:	undetermined
Initial boiling point and boiling range:	undetermined
- **Flash point:** Not applicable
- **Flammability (solid, gaseous):** Not applicable.
- **Decomposition temperature:** Not determined.
- **Self igniting:** Product is not selfigniting.
- **Explosive properties:** Product does not present an explosion hazard.
- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.
- **Vapour pressure at 20 °C:** 23 hPa
- **Density at 20 °C:** 1 g/cm<sup>3</sup>
- **Relative density:** Not determined.
- **Vapour density:** Not determined.
- **Evaporation rate:** Not determined.
- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix
- **Partition coefficient: n-octanol/water:** Not determined.
- **Viscosity:**

dynamic:	Not determined.
----------	-----------------

(Contd. on page 4)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 20.09.2017

Trade name: **Bio-Plex® Standard Diluent**

(Contd. of page 3)

<b>kinematic:</b>	Not determined.
<b>Solvent content:</b>	
<b>Water:</b>	74.1 %
<b>Solids content:</b>	90.0 %
<b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

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

### SECTION 11: Toxicological information

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

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 5)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 20.09.2017

Trade name: **Bio-Plex® Standard Diluent**

(Contd. of page 4)

- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

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

### SECTION 14: Transport information

- |  |                 |
|--|-----------------|
| · <b>14.1 UN-Number</b>  | Void            |
| · <b>ADR, ADN, IMDG, IATA</b>  |                 |
| · <b>14.2 UN proper shipping name</b>  | Void            |
| · <b>ADR, ADN, IMDG, IATA</b>  |                 |
| · <b>14.3 Transport hazard class(es)</b>   |                 |
| · <b>ADR, ADN, IMDG, IATA</b>  |                 |
| · <b>Class</b>   | Void            |
| · <b>14.4 Packing group</b>  |                 |
| · <b>ADR, IMDG, IATA</b>   | Void            |
| · <b>14.5 Environmental hazards:</b>   | Not applicable. |
| · <b>14.6 Special precautions for user</b>                                       | Not applicable. |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | Void            |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations**
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

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

- **Department issuing SDS:** Environmental Health and Safety.

(Contd. on page 6)

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

Printing date 06.04.2018

Revision: 20.09.2017

**Trade name: Bio-Plex® Standard Diluent**

(Contd. of page 5)

**· Contact:**

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

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

**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

DE

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 20.09.2017

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

- **1.1 Product identifier**
- **Trade name:** Bio-Plex® Sample Diluent
- **Article number:**  
10014641, 9704423, 9703895, 171305043, 10022367, 10022619, 10022628, 10041561, 10041562, 12005851
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Bio-Rad Laboratories G.m.b.H.  
Heidemann Strasse 164  
D-80939 München  
Germany  
phone: 0049-89-31884-0 fax: 0049-89-31884-100
- **Information department:** TechsupportLSG.CE@bio-rad.com, CSD\_Techsupport@bio-rad.com, qcfragen@bio-rad.com
- **1.4 Emergency telephone number:** 0049-89-31884-0

### SECTION 2: Hazards identification

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

### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- **Dangerous components:** Void
- **Additional information** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

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

(Contd. on page 2)



## Safety data sheet

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

Printing date 06.04.2018

Revision: 20.09.2017

Trade name: **Bio-Plex® Sample Diluent**

(Contd. of page 1)

#### · **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### **SECTION 5: Firefighting measures**

#### · **5.1 Extinguishing media**

· **Suitable extinguishing agents** Use fire fighting measures that suit the environment.· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

#### · **5.3 Advice for firefighters**

· **Protective equipment:** No special measures required.

### **SECTION 6: Accidental release measures**

· **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.· **6.2 Environmental precautions:** No special measures required.

#### · **6.3 Methods and material for containment and cleaning up:**

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

#### · **6.4 Reference to other sections**

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### **SECTION 7: Handling and storage**

· **7.1 Precautions for safe handling** No special measures required.· **Information about protection against explosions and fires:** No special measures required.

#### · **7.2 Conditions for safe storage, including any incompatibilities**

##### · **Storage**

· **Requirements to be met by storerooms and receptacles:** According to product specification· **Information about storage in one common storage facility:** Not required.· **Further information about storage conditions:** None.· **7.3 Specific end use(s)** No further relevant information available.

### **SECTION 8: Exposure controls/personal protection**

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

#### · **8.1 Control parameters**

· **Components with limit values that require monitoring at the workplace:**

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

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

#### · **8.2 Exposure controls**

· **Personal protective equipment**· **General protective and hygienic measures**

The usual precautionary measures should be adhered to when handling chemicals.

(Contd. on page 3)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 20.09.2017

Trade name: **Bio-Plex® Sample 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

### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Not determined.

· pH-value at 20 °C: 7.4

##### · Change in condition

Melting point/freezing point:	0 °C
Initial boiling point and boiling range:	undetermined

· Flash point: Not applicable

· Flammability (solid, gaseous) Not applicable.

· Decomposition temperature: Not determined.

· Self igniting: Product is not selfigniting.

· Explosive properties: Product does not present an explosion hazard.

##### · Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Vapour pressure at 20 °C: 23 hPa

· Density at 20 °C: 1 g/cm<sup>3</sup>

· Relative density Not determined.

· Vapour density Not determined.

· Evaporation rate Not determined.

##### · Solubility in / Miscibility with

Water: Fully miscible

· Partition coefficient: n-octanol/water: Not determined.

##### · Viscosity:

dynamic:	Not determined.
kinematic:	Not determined.

##### · Solvent content:

Water: 98.7 %

(Contd. on page 4)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 20.09.2017

Trade name: **Bio-Plex® Sample Diluent**

(Contd. of page 3)

· **9.2 Other information** No further relevant information available.

## SECTION 10: Stability and reactivity

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

## SECTION 11: Toxicological information

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

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Dispose of waste in accordance to applicable national, regional, or local regulations.

(Contd. on page 5)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 20.09.2017

Trade name: **Bio-Plex® Sample Diluent**

(Contd. of page 4)

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

### SECTION 14: Transport information

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

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations**
- **Water hazard class:** Generally not hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

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

- **Department issuing SDS:** Environmental Health and Safety.
- **Contact:**  
Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000  
(Contd. on page 6)

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

Printing date 06.04.2018

Revision: 20.09.2017

**Trade name: Bio-Plex® Sample Diluent**

(Contd. of page 5)

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

## Safety data sheet

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

Printing date 06.04.2018

Revision: 16.03.2018

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

- **1.1 Product identifier**
- **Trade name:** Bio-Plex® Assay Buffer
- **Article number:** 9723892, 9703892, 9704415, 171304100, 10014939, 10014940, 10014822, 10014823
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Bio-Rad Laboratories G.m.b.H.  
Heidemann Strasse 164  
D-80939 München  
Germany  
phone: 0049-89-31884-0 fax: 0049-89-31884-100
- **Information department:** TechsupportLSG.CE@bio-rad.com, CSD\_Techsupport@bio-rad.com, qcfragen@bio-rad.com
- **1.4 Emergency telephone number:** 0049-89-31884-0

#### SECTION 2: Hazards identification

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

#### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- **Dangerous components:** Void
- **Additional information** For the wording of the listed hazard phrases refer to section 16.

#### SECTION 4: First aid measures

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

(Contd. on page 2)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 16.03.2018

Trade name: **Bio-Plex® Assay Buffer**

(Contd. of page 1)

#### · **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### **SECTION 5: Firefighting measures**

#### · **5.1 Extinguishing media**

· **Suitable extinguishing agents** Use fire fighting measures that suit the environment.· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

#### · **5.3 Advice for firefighters**

· **Protective equipment:** No special measures required.

### **SECTION 6: Accidental release measures**

· **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.· **6.2 Environmental precautions:** Dilute with plenty of water.

#### · **6.3 Methods and material for containment and cleaning up:**

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

#### · **6.4 Reference to other sections**

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### **SECTION 7: Handling and storage**

· **7.1 Precautions for safe handling** No special measures required.· **Information about protection against explosions and fires:** No special measures required.

#### · **7.2 Conditions for safe storage, including any incompatibilities**

##### · **Storage**

· **Requirements to be met by storerooms and receptacles:** According to product specification· **Information about storage in one common storage facility:** Not required.· **Further information about storage conditions:** None.· **7.3 Specific end use(s)** No further relevant information available.

### **SECTION 8: Exposure controls/personal protection**

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

#### · **8.1 Control parameters**

· **Components with limit values that require monitoring at the workplace:**

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

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

#### · **8.2 Exposure controls**

· **Personal protective equipment**· **General protective and hygienic measures**

The usual precautionary measures should be adhered to when handling chemicals.

(Contd. on page 3)



## Safety data sheet

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

Printing date 06.04.2018

Revision: 16.03.2018

Trade name: **Bio-Plex® Assay Buffer**

(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

### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

- |                           |                 |
|---------------------------|-----------------|
| · <b>Form:</b>            | Fluid           |
| · <b>Colour:</b>          | Colourless      |
| · <b>Odour:</b>           | Odourless       |
| · <b>Odour threshold:</b> | Not determined. |

· <b>pH-value at 20 °C:</b>	7.4
-----------------------------	-----

##### · Change in condition

- |   |              |
|---|--------------|
| · <b>Melting point/freezing point:</b>            | 0 °C         |
| · <b>Initial boiling point and boiling range:</b> | undetermined |

· <b>Flash point:</b>	Not applicable
-----------------------	----------------

· <b>Flammability (solid, gaseous)</b>	Not applicable.
--	-----------------

· <b>Decomposition temperature:</b>	Not determined.
-------------------------------------	-----------------

· <b>Self igniting:</b>	Product is not selfigniting.
-------------------------	------------------------------

· <b>Explosive properties:</b>	Product does not present an explosion hazard.
--------------------------------	---

##### · Explosion limits:

- |                 |                 |
|-----------------|-----------------|
| · <b>Lower:</b> | Not determined. |
| · <b>Upper:</b> | Not determined. |

· <b>Vapour pressure at 20 °C:</b>	23 hPa
------------------------------------	--------

· <b>Density at 20 °C:</b>	1.00579 g/cm <sup>3</sup>
----------------------------	---------------------------

· <b>Relative density</b>	Not determined.
---------------------------	-----------------

· <b>Vapour density</b>	Not determined.
-------------------------	-----------------

· <b>Evaporation rate</b>	Not determined.
---------------------------	-----------------

##### · Solubility in / Miscibility with

· <b>Water:</b>	Fully miscible
-----------------	----------------

· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
--	-----------------

##### · Viscosity:

- |                     |                 |
|---------------------|-----------------|
| · <b>dynamic:</b>   | Not determined. |
| · <b>kinematic:</b> | Not determined. |

##### · Solvent content:

· <b>Water:</b>	97.9 %
-----------------	--------

· <b>Solids content:</b>	2.0 %
--------------------------	-------

(Contd. on page 4)



## Safety data sheet

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

Printing date 06.04.2018

Revision: 16.03.2018

Trade name: **Bio-Plex® Assay Buffer**

(Contd. of page 3)

· **9.2 Other information** No further relevant information available.

## SECTION 10: Stability and reactivity

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

## SECTION 11: Toxicological information

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

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Dispose of waste in accordance to applicable national, regional, or local regulations.

(Contd. on page 5)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 16.03.2018

Trade name: Bio-Plex® Assay Buffer

(Contd. of page 4)

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

### SECTION 14: Transport information

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

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations**
- **Water hazard class:** Generally not hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

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

- **Department issuing SDS:** Environmental Health and Safety.

- **Contact:**

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

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

(Contd. on page 6)

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

Printing date 06.04.2018

Revision: 16.03.2018

**Trade name: Bio-Plex® Assay Buffer**

(Contd. of page 5)

**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

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

DE

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 20.09.2017

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

#### 1.1 Product identifier

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

Article number: 171304040, 12006121, 12005850

1.2 Relevant identified uses of the substance or mixture and uses advised against  
No further relevant information available.

Application of the substance / the mixture Laboratory chemicals

#### 1.3 Details of the supplier of the safety data sheet

##### Manufacturer/Supplier:

Bio-Rad Laboratories G.m.b.H.  
Heidemann Strasse 164  
D-80939 München  
Germany

phone: 0049-89-31884-0 fax: 0049-89-31884-100

Information department: TechsupportLSG.CE@bio-rad.com, CSD\_Techsupport@bio-rad.com, qcfragen@bio-rad.com

1.4 Emergency telephone number: 0049-89-31884-0

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

#### Hazard pictograms



GHS07

Signal word Warning

#### Hazard-determining components of labelling:

Proprietary Reagent D

#### Hazard statements

H302 Harmful if swallowed.

H412 Harmful to aquatic life with long lasting effects.

#### Precautionary statements

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

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

#### 2.3 Other hazards

#### Results of PBT and vPvB assessment

PBT: Not applicable.

(Contd. on page 2)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 20.09.2017

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

(Contd. of page 1)

· **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

#### · 3.2 Chemical characterisation: Mixtures

· **Description:** Mixture of the substances listed below with nonhazardous additions.

#### · **Dangerous components:**

Proprietary Reagent B	Acute Tox. 4, H312; Acute Tox. 4, H332	1-2.5%
Proprietary Reagent D	Acute Tox. 2, H300 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.1-1%

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

### SECTION 4: First aid measures

#### · 4.1 Description of first aid measures

##### · **General information**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **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**

Call for a doctor immediately.

Rinse mouth with water. Seek medical attention and appropriate follow-up.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

#### · **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### SECTION 5: Firefighting measures

#### · 5.1 Extinguishing media

· **Suitable extinguishing agents** Use fire fighting measures that suit the environment.· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

#### · 5.3 Advice for firefighters

· **Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.

#### · 6.2 Environmental precautions:

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.

#### · 6.3 Methods and material for containment and cleaning up:

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

#### · 6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

(Contd. on page 3)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 20.09.2017

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

See Section 13 for disposal information.

(Contd. of page 2)

### SECTION 7: Handling and storage

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

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures** Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

### SECTION 9: Physical and chemical properties

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

Form:	Liquid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Not determined.
- **pH-value at 20 °C:** 7.4
- **Change in condition**

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

(Contd. on page 4)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 20.09.2017

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

(Contd. of page 3)

· <b>Flash point:</b>	Not applicable
· <b>Flammability (solid, gaseous)</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Self igniting:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	Not determined.
Upper:	Not determined.
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density:</b>	Not determined
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
dynamic:	Not determined.
kinematic:	Not determined.
· <b>Solvent content:</b>	
Water:	88.4 %
Solids content:	11.1 %
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

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

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**  
Harmful if swallowed.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

(Contd. on page 5)



## Safety data sheet

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

Printing date 06.04.2018

Revision: 20.09.2017

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

(Contd. of page 4)

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

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **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.  
 Harmful to aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

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

### SECTION 14: Transport information

- |   |      |
|---|------|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Number</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> </ul>  | Void |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> </ul>                            | Void |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transport hazard class(es)</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> <li>· <b>Class</b></li> </ul> | Void |

(Contd. on page 6)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 20.09.2017

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

(Contd. of page 5)

· <b>14.4 Packing group</b> · <b>ADR, IMDG, IATA</b>	Void
· <b>14.5 Environmental hazards:</b> · <b>Marine pollutant:</b>	No
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	Void

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations**
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

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

- **Relevant phrases**  
H300 Fatal if swallowed.  
H312 Harmful in contact with skin.  
H332 Harmful if inhaled.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.
- **Department issuing SDS:** Environmental Health and Safety.
- **Contact:**  
Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000  
  
Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

(Contd. on page 7)

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

Printing date 06.04.2018

Revision: 20.09.2017

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

(Contd. of page 6)

*Acute Tox. 2: Acute toxicity – Category 2**Acute Tox. 4: Acute toxicity – Category 4**Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1**Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3**\* **Data compared to the previous version altered.***

DE

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 11.08.2017

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

#### 1.1 Product identifier

Trade name: **Bio-Plex® Detection Antibody Diluent HB**

Article number: 10032400, 10031831, 10032593, 12005852

1.2 Relevant identified uses of the substance or mixture and uses advised against  
No further relevant information available.

Application of the substance / the mixture Laboratory chemicals

#### 1.3 Details of the supplier of the safety data sheet

##### Manufacturer/Supplier:

Bio-Rad Laboratories G.m.b.H.  
Heidemann Strasse 164  
D-80939 München  
Germany

phone: 0049-89-31884-0 fax: 0049-89-31884-100

Information department: TechsupportLSG.CE@bio-rad.com, CSD\_Techsupport@bio-rad.com, qcfragen@bio-rad.com

1.4 Emergency telephone number: 0049-89-31884-0

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

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

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



GHS07

Signal word Warning

Hazard-determining components of labelling:

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).

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

#### 2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

(Contd. on page 2)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 11.08.2017

Trade name: **Bio-Plex® Detection Antibody Diluent HB**

(Contd. of page 1)

· **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

#### · 3.2 Chemical characterisation: Mixtures

· **Description:** Mixture of the substances listed below with nonhazardous additions.

#### · Dangerous components:

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)	0.001-0.01%
	Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	
	Skin Corr. 1B, H314	
	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
	Skin Sens. 1, H317	

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

### SECTION 4: First aid measures

#### · 4.1 Description of first aid measures

· **General information** No special measures required.

#### · After inhalation

Supply fresh air 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.· **After eye contact** Rinse opened eye for several minutes under running water.· **After swallowing** Rinse mouth with water. Seek medical attention and appropriate follow-up.· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### SECTION 5: Firefighting measures

#### · 5.1 Extinguishing media

· **Suitable extinguishing agents** Use fire fighting measures that suit the environment.· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

#### · 5.3 Advice for firefighters

· **Protective equipment:** Wear self-contained respiratory protective device.

### SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

#### · 6.3 Methods and material for containment and cleaning up:

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

#### · 6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

(Contd. on page 3)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 11.08.2017

Trade name: **Bio-Plex® Detection Antibody Diluent HB**

See Section 13 for disposal information.

(Contd. of page 2)

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

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

- **8.1 Control parameters**

- **Components with limit values that require monitoring at the workplace:**

**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)**

MAK (Germany, (German))	Long-term value: 0.2E mg/m <sup>3</sup> vgl. Abschn. Xc
-------------------------	--

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

- **8.2 Exposure controls**

- **Personal protective equipment**

- **General protective and hygienic measures**

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 required.

- **Protection of hands:** Protective gloves.

- **Material of gloves** Synthetic gloves

- **Penetration time of glove material**

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

- **Eye protection:** Safety glasses

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Fluid

**Colour:** Colourless

· **Odour:** Odourless

· **Odour threshold:** Not determined.

(Contd. on page 4)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 11.08.2017

Trade name: **Bio-Plex® Detection Antibody Diluent HB**

(Contd. of page 3)

· <b>pH-value at 20 °C:</b>	7.4
· <b>Change in condition</b>	
Melting point/freezing point:	undetermined
Initial boiling point and boiling range:	undetermined
· <b>Flash point:</b>	Not applicable
· <b>Flammability (solid, gaseous)</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Self igniting:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	Not determined.
Upper:	Not determined.
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density at 20 °C:</b>	1 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not determined.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
dynamic:	Not determined.
kinematic:	Not determined.
· <b>Solvent content:</b>	
Water:	92.8 %
Solids content:	1.3 %
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

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

DE  
(Contd. on page 5)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 11.08.2017

Trade name: **Bio-Plex® Detection Antibody Diluent HB**

(Contd. of page 4)

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

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

### SECTION 14: Transport information

- |  |             |
|--|-------------|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Number</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> </ul>               | <p>Void</p> |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> </ul> | <p>Void</p> |

(Contd. on page 6)



## Safety data sheet

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

Printing date 06.04.2018

Revision: 11.08.2017

Trade name: **Bio-Plex® Detection Antibody Diluent HB**

(Contd. of page 5)

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

## SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations**
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

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

- **Relevant phrases**
  - H301 Toxic if swallowed.
  - H311 Toxic in contact with skin.
  - H314 Causes severe skin burns and eye damage.
  - H317 May cause an allergic skin reaction.
  - H331 Toxic if inhaled.
  - H400 Very toxic to aquatic life.
  - H410 Very toxic to aquatic life with long lasting effects.
- **Department issuing SDS:** Environmental Health and Safety.
- **Contact:**
  - Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000
  - Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000
- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association

(Contd. on page 7)



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

Printing date 06.04.2018

Revision: 11.08.2017

**Trade name: Bio-Plex® Detection Antibody Diluent HB**

(Contd. of page 6)

*GHS: Globally Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 3: Acute toxicity – Category 3**Skin Corr. 1B: Skin corrosion/irritation – Category 1B**Skin Sens. 1: Skin sensitisation – Category 1**Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1*

DE

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 20.09.2017

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

#### · 1.1 Product identifier

· Trade name: **Streptavidin-PE**

· Article number: 171304501, 9704418, 9703887, 9703897, 10031861

· 1.2 Relevant identified uses of the substance or mixture and uses advised against  
No further relevant information available.

· Application of the substance / the mixture Laboratory chemicals

#### · 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Bio-Rad Laboratories G.m.b.H.

Heidemann Strasse 164

D-80939 München

Germany

phone: 0049-89-31884-0 fax: 0049-89-31884-100

· Information department: TechsupportLSG.CE@bio-rad.com, CSD\_Techsupport@bio-rad.com, qcfragen@bio-rad.com

· 1.4 Emergency telephone number: 0049-89-31884-0

### SECTION 2: Hazards identification

#### · 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.

#### · 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008 Void

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

#### · 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

### SECTION 3: Composition/information on ingredients

#### · 3.1 Chemical characterisation: Substances

· CAS No. Description:

7732-18-5 water

· Identification number(s):

· EC number: 231-791-2

#### · 3.2 Chemical characterisation: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components: Void

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

### SECTION 4: First aid measures

#### · 4.1 Description of first aid measures

· General information No special measures required.

· After inhalation Supply fresh air; consult doctor in case of complaints.

· After skin contact Generally the product does not irritate the skin.

(Contd. on page 2)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 20.09.2017

**Trade name: Streptavidin-PE**

(Contd. of page 1)

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

### SECTION 5: Firefighting measures

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

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**  
No dangerous substances are released.  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

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

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 3)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 20.09.2017

Trade name: Streptavidin-PE

(Contd. of page 2)

- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures should be adhered to when handling chemicals.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form: Fluid
  - Colour: Colourless
  - Odour: Odourless
  - Odour threshold: Not determined.
- **pH-value at 20 °C:** 7.4
- **Change in condition**
  - Melting point/freezing point: 0 °C
  - Initial boiling point and boiling range: undetermined
- **Flash point:** Not applicable
- **Flammability (solid, gaseous):** Not applicable.
- **Decomposition temperature:** Not determined.
- **Self igniting:** Product is not selfigniting.
- **Explosive properties:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.
- **Vapour pressure at 20 °C:** 23 hPa
- **Density at 20 °C:** 1 g/cm<sup>3</sup>
- **Relative density:** Not determined.
- **Vapour density:** Not determined.
- **Evaporation rate:** Not determined.
- **Solubility in / Miscibility with Water:** Fully miscible
- **Partition coefficient: n-octanol/water:** Not determined.
- **Viscosity:**
  - dynamic: Not determined.

(Contd. on page 4)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 20.09.2017

**Trade name: Streptavidin-PE**

(Contd. of page 3)

**kinematic:**

Not determined.

**Solvent content:****Water:**

98.9 %

**9.2 Other information**

No further relevant information available.

## SECTION 10: Stability and reactivity

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

## SECTION 11: Toxicological information

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

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

DE  
(Contd. on page 5)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 20.09.2017

Trade name: Streptavidin-PE

(Contd. of page 4)

### SECTION 13: Disposal considerations

#### · 13.1 Waste treatment methods

##### · Recommendation

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

##### · Uncleaned packagings:

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

### SECTION 14: Transport information

#### · 14.1 UN-Number

· ADR, ADN, IMDG, IATA Void

#### · 14.2 UN proper shipping name

· ADR, ADN, IMDG, IATA Void

#### · 14.3 Transport hazard class(es)

· ADR, ADN, IMDG, IATA

· Class Void

#### · 14.4 Packing group

· ADR, IMDG, IATA Void

#### · 14.5 Environmental hazards:

· Marine pollutant: No

#### · 14.6 Special precautions for user

Not applicable.

#### · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

#### · Transport/Additional information:

Not dangerous according to the above specifications.

#### · UN "Model Regulation":

Void

### SECTION 15: Regulatory information

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

##### · Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

##### · National regulations

· Water hazard class: Generally not hazardous for water.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

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

(Contd. on page 6)

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

Printing date 06.04.2018

Revision: 20.09.2017

**Trade name: Streptavidin-PE**

(Contd. of page 5)

· **Department issuing SDS:** Environmental Health and Safety.

· **Contact:**

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

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

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

DE

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 06.04.2018

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

#### 1.1 Product identifier

Trade name: **Bio-Plex® Pro™ Human Cytokine Screening Panel, Bead Blend 48-Plex**

Article number: 12007294

1.2 Relevant identified uses of the substance or mixture and uses advised against  
No further relevant information available.

Application of the substance / the mixture Laboratory chemicals

#### 1.3 Details of the supplier of the safety data sheet

##### Manufacturer/Supplier:

Bio-Rad Laboratories G.m.b.H.  
Heidemann Strasse 164  
D-80939 München  
Germany

phone: 0049-89-31884-0 fax: 0049-89-31884-100

Information department: TechsupportLSG.CE@bio-rad.com, CSD\_Techsupport@bio-rad.com, qcfragen@bio-rad.com

1.4 Emergency telephone number: 0049-89-31884-0

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

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

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



GHS07

Signal word Warning

Hazard-determining components of labelling:

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).

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

#### 2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

(Contd. on page 2)



## Safety data sheet

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

Printing date 06.04.2018

Revision: 06.04.2018

Trade name: **Bio-Plex® Pro™ Human Cytokine Screening Panel, Bead Blend 48-Plex**

(Contd. of page 1)

· **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

#### · 3.2 Chemical characterisation: Mixtures

· **Description:** Mixture of the substances listed below with nonhazardous additions.

#### · Dangerous components:

	Proprietary Reagent K Eye Irrit. 2, H319	2.5-5%
	Proprietary Reagent D Acute Tox. 2, H300 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.01-0.1%
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 Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 Skin Corr. 1B, H314 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sens. 1, H317	0.01-0.1%

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

### SECTION 4: First aid measures

#### · 4.1 Description of first aid measures

· **General information** No special measures required.

#### · After inhalation

Supply fresh air 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.· **After eye contact** Rinse opened eye for several minutes under running water.· **After swallowing** Rinse mouth with water. Seek medical attention and appropriate follow-up.· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### SECTION 5: Firefighting measures

#### · 5.1 Extinguishing media

· **Suitable extinguishing agents** Use fire fighting measures that suit the environment.· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

#### · 5.3 Advice for firefighters

· **Protective equipment:** Wear self-contained respiratory protective device.

### SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.· **6.2 Environmental precautions:** No special measures required.

(Contd. on page 3)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 06.04.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Bead Blend 48-Plex**

(Contd. of page 2)

- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

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

#### 8.1 Control parameters

- **Components with limit values that require monitoring at the workplace:**

**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)**

MAK (Germany, (German))	Long-term value: 0.2E mg/m <sup>3</sup> vgl. Abschn. Xc
-------------------------	--

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

DE

(Contd. on page 4)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 06.04.2018

Trade name: **Bio-Plex® Pro™ Human Cytokine Screening Panel, Bead Blend 48-Plex**

(Contd. of page 3)

### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

Form:	Suspension
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Not determined.

· pH-value: Not determined.

##### · Change in condition

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

· Flash point: Not applicable

· Flammability (solid, gaseous) Not applicable.

· Decomposition temperature: Not determined.

· Self igniting: Product is not selfigniting.

· Explosive properties: Product does not present an explosion hazard.

##### · Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Vapour pressure at 20 °C: 23 hPa

· Density: Not determined

· Relative density Not determined.

· Vapour density Not determined.

· Evaporation rate Not determined.

##### · Solubility in / Miscibility with

Water:	Partly soluble
--------	----------------

· Partition coefficient: n-octanol/water: Not determined.

##### · Viscosity:

dynamic:	Not determined.
kinematic:	Not determined.

##### · Solvent content:

Water:	70.0 %
--------	--------

Solids content: 11.2 %

· 9.2 Other information No further relevant information available.

### SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

#### · 10.2 Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions No dangerous reactions known

(Contd. on page 5)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 06.04.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Bead Blend 48-Plex**

(Contd. of page 4)

- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

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

## SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA**

Void

(Contd. on page 6)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 06.04.2018

Trade name: **Bio-Plex® Pro™ Human Cytokine Screening Panel, Bead Blend 48-Plex**

(Contd. of page 5)

· <b>14.2 UN proper shipping name</b> · <b>ADR, ADN, IMDG, IATA</b>	Void
· <b>14.3 Transport hazard class(es)</b> · <b>ADR, ADN, IMDG, IATA</b> · <b>Class</b>	Void
· <b>14.4 Packing group</b> · <b>ADR, IMDG, IATA</b>	Void
· <b>14.5 Environmental hazards:</b>	Not applicable.
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	Void

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

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

- **Relevant phrases**  
H300 Fatal if swallowed.  
H301 Toxic if swallowed.  
H311 Toxic in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H331 Toxic if inhaled.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.
- **Department issuing SDS:** Environmental Health and Safety.
- **Contact:**  
Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000  
  
Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

(Contd. on page 7)

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

Printing date 06.04.2018

Revision: 06.04.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Bead Blend 48-Plex**

(Contd. of page 6)

IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
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  
NIOSH: National Institute for Occupational Safety  
OSHA: Occupational Safety & Health  
Acute Tox. 2: Acute toxicity – Category 2  
Acute Tox. 3: Acute toxicity – Category 3  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
Skin Sens. 1: Skin sensitisation – Category 1  
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

DE

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 06.04.2018

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

#### 1.1 Product identifier

· **Trade name:** Bio-Plex® Pro™ Human Cytokine Screening Panel, Detection Antibodies Blend 48-Plex

· **Article number:** 12007293

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.

· **Application of the substance / the mixture** Laboratory chemicals

#### 1.3 Details of the supplier of the safety data sheet

##### Manufacturer/Supplier:

Bio-Rad Laboratories G.m.b.H.  
Heidemann Strasse 164  
D-80939 München  
Germany

phone: 0049-89-31884-0 fax: 0049-89-31884-100

· **Information department:** TechsupportLSG.CE@bio-rad.com, CSD\_Techsupport@bio-rad.com, qcfragen@bio-rad.com

· **1.4 Emergency telephone number:** 0049-89-31884-0

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

· **Classification according to Regulation (EC) No 1272/2008**

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

#### 2.2 Label elements

· **Labelling according to Regulation (EC) No 1272/2008**

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

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labelling:**

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).

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

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

(Contd. on page 2)



## Safety data sheet

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

Printing date 06.04.2018

Revision: 06.04.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Detection Antibodies Blend 48-Plex**

(Contd. of page 1)

· **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

#### · 3.2 Chemical characterisation: Mixtures

 · **Description:** Mixture of the substances listed below with nonhazardous additions.

#### · **Dangerous components:**

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 Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 Skin Corr. 1B, H314 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sens. 1, H317	0.01-0.1%
------------	--	-----------

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

### SECTION 4: First aid measures

#### · 4.1 Description of first aid measures

 · **General information** No special measures required.

#### · **After inhalation**

Supply fresh air 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.

 · **After eye contact** Rinse opened eye for several minutes under running water.

 · **After swallowing** Rinse mouth with water. Seek medical attention and appropriate follow-up.

 · **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

 · **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### SECTION 5: Firefighting measures

#### · 5.1 Extinguishing media

 · **Suitable extinguishing agents** Use fire fighting measures that suit the environment.

 · **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

#### · 5.3 Advice for firefighters

 · **Protective equipment:** Wear self-contained respiratory protective device.

### SECTION 6: Accidental release measures

 · **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.

 · **6.2 Environmental precautions:** No special measures required.

#### · **6.3 Methods and material for containment and cleaning up:**

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

#### · **6.4 Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

(Contd. on page 3)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 06.04.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Detection Antibodies Blend 48-Plex**

See Section 13 for disposal information.

(Contd. of page 2)

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

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

#### · 8.1 Control parameters

- **Components with limit values that require monitoring at the workplace:**

**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)**

MAK (Germany, (German))	Long-term value: 0.2E mg/m <sup>3</sup> vgl. Abschn. Xc
-------------------------	--

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

#### · 8.2 Exposure controls

##### · **Personal protective equipment**

##### · **General protective and hygienic measures**

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 required.

- **Protection of hands:** Protective gloves.

- **Material of gloves** Synthetic gloves

- **Penetration time of glove material**

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

- **Eye protection:** Safety glasses

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

#### · **General Information**

##### · **Appearance:**

**Form:**

Liquid

**Colour:**

Colourless

##### · **Odour:**

Odourless

##### · **Odour threshold:**

Not determined.

(Contd. on page 4)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 06.04.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Detection Antibodies Blend 48-Plex**

(Contd. of page 3)

· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
Melting point/freezing point:	undetermined
Initial boiling point and boiling range:	100 °C
· <b>Flash point:</b>	Not applicable
· <b>Flammability (solid, gaseous)</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Self igniting:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	Not determined.
Upper:	Not determined.
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density:</b>	Not determined
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with</b>	
Water:	Fully miscible
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
dynamic:	Not determined.
kinematic:	Not determined.
· <b>Solvent content:</b>	
Water:	75.0 %
Solids content:	14.5 %
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of lead azide and copper azide.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**  
This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of lead azide and copper azide.

(Contd. on page 5)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 06.04.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Detection Antibodies Blend 48-Plex**

(Contd. of page 4)

- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

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

## SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA**

Void

(Contd. on page 6)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 06.04.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Detection Antibodies Blend 48-Plex**

(Contd. of page 5)

· <b>14.2 UN proper shipping name</b> · <b>ADR, ADN, IMDG, IATA</b>	Void
· <b>14.3 Transport hazard class(es)</b> · <b>ADR, ADN, IMDG, IATA</b> · <b>Class</b>	Void
· <b>14.4 Packing group</b> · <b>ADR, IMDG, IATA</b>	Void
· <b>14.5 Environmental hazards:</b>	Not applicable.
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	Void

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

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

- **Relevant phrases**  
 H301 Toxic if swallowed.  
 H311 Toxic in contact with skin.  
 H314 Causes severe skin burns and eye damage.  
 H317 May cause an allergic skin reaction.  
 H331 Toxic if inhaled.  
 H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.
- **Department issuing SDS:** Environmental Health and Safety.
- **Contact:**  
 Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000  
  
 Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000
- **Abbreviations and acronyms:**  
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 IATA: International Air Transport Association

(Contd. on page 7)

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

Printing date 06.04.2018

Revision: 06.04.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Detection Antibodies Blend 48-Plex**

(Contd. of page 6)

ACGIH: American Conference of Governmental Industrial Hygienists  
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  
NIOSH: National Institute for Occupational Safety  
OSHA: Occupational Safety & Health  
Acute Tox. 3: Acute toxicity – Category 3  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
Skin Sens. 1: Skin sensitisation – Category 1  
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

DE

## Safety data sheet

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

Printing date 06.04.2018

Revision: 22.03.2018

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

##### 1.1 Product identifier

· **Trade name:** Bio-Plex® Pro™ Human Cytokine Screening Panel, Standards

· **Article number:** 12007919, 12007920, 12007292

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.

· **Application of the substance / the mixture** Laboratory chemicals

##### 1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**

Bio-Rad Laboratories G.m.b.H.  
Heidemann Strasse 164  
D-80939 München  
Germany

phone: 0049-89-31884-0 fax: 0049-89-31884-100

· **Information department:** TechsupportLSG.CE@bio-rad.com, CSD\_Techsupport@bio-rad.com, qcfragen@bio-rad.com

· **1.4 Emergency telephone number:** 0049-89-31884-0

#### SECTION 2: Hazards identification

##### 2.1 Classification of the substance or mixture

· **Classification according to Regulation (EC) No 1272/2008** The product is not classified, according to the CLP regulation.

##### 2.2 Label elements

· **Labelling according to Regulation (EC) No 1272/2008** Void

· **Hazard pictograms** Void

· **Signal word** Void

· **Hazard statements** Void

· **Additional information:**

Safety data sheet available on request.

##### 2.3 Other hazards

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

#### SECTION 3: Composition/information on ingredients

##### 3.2 Chemical characterisation: Mixtures

· **Description:** Mixture of the substances listed below with nonhazardous additions.

##### Dangerous components:

Proprietary Reagent J23	Acute Tox. 4, H312; Acute Tox. 4, H332	2.5-5%
Proprietary Reagent B	Acute Tox. 4, H312; Acute Tox. 4, H332	0.1-1%

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

#### SECTION 4: First aid measures

##### 4.1 Description of first aid measures

· **General information** No special measures required.

· **After inhalation** Supply fresh air; consult doctor in case of complaints.

· **After eye contact** Rinse opened eye for several minutes under running water.

(Contd. on page 2)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 22.03.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Standards**

(Contd. of page 1)

- **After swallowing** Rinse mouth with water. Seek medical attention and appropriate follow-up.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

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

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

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

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures should be adhered to when handling chemicals.

(Contd. on page 3)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 22.03.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Standards**

(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

## SECTION 9: Physical and chemical properties

### · 9.1 Information on basic physical and chemical properties

#### · General Information

##### · Appearance:

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

· **pH-value:** Not applicable.

#### · Change in condition

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

· **Flash point:** Not applicable

· **Flammability (solid, gaseous)** Not determined.

· **Decomposition temperature:** Not determined.

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

· **Explosive properties:** Product does not present an explosion hazard.

#### · Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· **Vapour pressure:** Not applicable.

Density:	Not determined
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.

#### · Solubility in / Miscibility with

Water:	Soluble
--------	---------

· **Partition coefficient: n-octanol/water:** Not determined.

#### · Viscosity:

dynamic:	Not applicable.
kinematic:	Not applicable.

#### · Solvent content:

Organic solvents:	0.1 %
-------------------	-------

(Contd. on page 4)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 22.03.2018

Trade name: **Bio-Plex® Pro™ Human Cytokine Screening Panel, Standards**

(Contd. of page 3)

· **9.2 Other information** No further relevant information available.

### SECTION 10: Stability and reactivity

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

### SECTION 11: Toxicological information

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

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Dispose of waste in accordance to applicable national, regional, or local regulations.

(Contd. on page 5)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 22.03.2018

Trade name: **Bio-Plex® Pro™ Human Cytokine Screening Panel, Standards**

(Contd. of page 4)

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

#### SECTION 14: Transport information

- |   |                 |
|---|-----------------|
| · <b>14.1 UN-Number</b><br>· <b>ADR, ADN, IMDG, IATA</b>                                    | Void            |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR, ADN, IMDG, IATA</b>                      | Void            |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Class</b> | Void            |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                     | Void            |
| · <b>14.5 Environmental hazards:</b>  | Not applicable. |
| · <b>14.6 Special precautions for user</b>  | Not applicable. |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>            | Not applicable. |
| · <b>UN "Model Regulation":</b>   | Void            |

#### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations**
- **Technical instructions (air):**

Class	Share in %
II	0.01-0.1

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

#### SECTION 16: Other information

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

- **Relevant phrases**  
H312 Harmful in contact with skin.  
H332 Harmful if inhaled.
- **Department issuing SDS:** Environmental Health and Safety.

(Contd. on page 6)

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

Printing date 06.04.2018

Revision: 22.03.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Standards**

(Contd. of page 5)

**· Contact:**

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

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

**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

Acute Tox. 4: Acute toxicity – Category 4

## Safety data sheet

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

Printing date 06.04.2018

Revision: 06.04.2018

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

##### 1.1 Product identifier

· **Trade name:** Bio-Plex® Pro™ Human Cytokine Screening Panel, Control

· **Article number:** 12007298

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.

· **Application of the substance / the mixture** Laboratory chemicals

##### 1.3 Details of the supplier of the safety data sheet

###### Manufacturer/Supplier:

Bio-Rad Laboratories G.m.b.H.  
Heidemann Strasse 164  
D-80939 München  
Germany

phone: 0049-89-31884-0 fax: 0049-89-31884-100

· **Information department:** TechsupportLSG.CE@bio-rad.com, CSD\_Techsupport@bio-rad.com, qcfragen@bio-rad.com

· **1.4 Emergency telephone number:** 0049-89-31884-0

#### SECTION 2: Hazards identification

##### 2.1 Classification of the substance or mixture

· **Classification according to Regulation (EC) No 1272/2008** The product is not classified, according to the CLP regulation.

##### 2.2 Label elements

· **Labelling according to Regulation (EC) No 1272/2008** Void

· **Hazard pictograms** Void

· **Signal word** Void

· **Hazard statements** Void

· **Additional information:**

Safety data sheet available on request.

##### 2.3 Other hazards

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

#### SECTION 3: Composition/information on ingredients

##### 3.2 Chemical characterisation: Mixtures

· **Description:** Mixture of the substances listed below with nonhazardous additions.

###### Dangerous components:

Proprietary Reagent J23	Acute Tox. 4, H312; Acute Tox. 4, H332	2.5-5%
Proprietary Reagent B	Acute Tox. 4, H312; Acute Tox. 4, H332	0.1-1%

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

#### SECTION 4: First aid measures

##### 4.1 Description of first aid measures

· **General information** No special measures required.

· **After inhalation** Supply fresh air; consult doctor in case of complaints.

· **After eye contact** Rinse opened eye for several minutes under running water.

(Contd. on page 2)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 06.04.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Control**

(Contd. of page 1)

- **After swallowing** Rinse mouth with water. Seek medical attention and appropriate follow-up.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

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

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

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

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures should be adhered to when handling chemicals.

(Contd. on page 3)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2018

Revision: 06.04.2018

Trade name: **Bio-Plex® Pro™ Human Cytokine Screening Panel, Control**

(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

### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

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

· **pH-value:** Not applicable.

##### · Change in condition

Melting point/freezing point:	undetermined
Initial boiling point and boiling range:	1,461 °C

· **Flash point:** Not applicable

· **Flammability (solid, gaseous)** Not determined.

· **Decomposition temperature:** Not determined.

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

· **Explosive properties:** Product does not present an explosion hazard.

##### · Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· **Vapour pressure:** Not applicable.

· **Density:** Not determined

· **Relative density** Not determined.

· **Vapour density** Not applicable.

· **Evaporation rate** Not applicable.

##### · Solubility in / Miscibility with

Water:	Fully miscible
--------	----------------

· **Partition coefficient: n-octanol/water:** Not determined.

##### · Viscosity:

dynamic:	Not applicable.
kinematic:	Not applicable.

##### · Solvent content:

Organic solvents:	0.1 %
-------------------	-------

(Contd. on page 4)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 06.04.2018

Trade name: **Bio-Plex® Pro™ Human Cytokine Screening Panel, Control**

(Contd. of page 3)

· **9.2 Other information** No further relevant information available.

### SECTION 10: Stability and reactivity

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

### SECTION 11: Toxicological information

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

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Dispose of waste in accordance to applicable national, regional, or local regulations.

(Contd. on page 5)

## Safety data sheet

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

Printing date 06.04.2018

Revision: 06.04.2018

Trade name: **Bio-Plex® Pro™ Human Cytokine Screening Panel, Control**

(Contd. of page 4)

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

### SECTION 14: Transport information

- |   |                 |
|---|-----------------|
| · <b>14.1 UN-Number</b><br>· <b>ADR, ADN, IMDG, IATA</b>                                    | Void            |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR, ADN, IMDG, IATA</b>                      | Void            |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Class</b> | Void            |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                     | Void            |
| · <b>14.5 Environmental hazards:</b>  | Not applicable. |
| · <b>14.6 Special precautions for user</b>  | Not applicable. |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>            | Not applicable. |
| · <b>UN "Model Regulation":</b>   | Void            |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations**
- **Technical instructions (air):**

Class	Share in %
II	0.01-0.1

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

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

- **Relevant phrases**  
H312 Harmful in contact with skin.  
H332 Harmful if inhaled.
- **Department issuing SDS:** Environmental Health and Safety.

(Contd. on page 6)

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

Printing date 06.04.2018

Revision: 06.04.2018

**Trade name: Bio-Plex® Pro™ Human Cytokine Screening Panel, Control**

(Contd. of page 5)

**· Contact:**

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

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

**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

Acute Tox. 4: Acute toxicity – Category 4