

Safety Data Sheet
 acc. to OSHA HCS

Printing date 06/10/2015

Reviewed on 06/10/2015

1 Identification
Product identifier
Trade name: 5X iProof™ HF Buffer

- **Catalog or product number:** 1725391, 10002441, 10002428, 10002064
- **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

Details of the supplier of the safety data sheet
Manufacturer/Supplier:

 Bio-Rad Laboratories, Life Science Group
 2000 Alfred Nobel Drive
 Hercules, California 94547

(510)741-1000

Information department:

 Technical services, customer support
 lsg_techserv_us@bio-rad.com

Emergency telephone number:

 1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.
 510-741-1000

2 Hazard(s) identification
Classification of the substance or mixture

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

Label elements

- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Additional information:** Contact with acids may cause release of toxic gases
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients
Chemical characterization: Mixtures
Description: Mixture of the substances listed below with non-hazardous additions.

Listing of dangerous and non-hazardous components:

7732-18-5	water	50-100%
7447-40-7	potassium chloride	2.5-5%

Additional information For the wording of the listed risk phrases refer to section 15.

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4 First-aid measures
Description of first aid measures

- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Generally the product does not irritate the skin.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Induce vomiting and call for medical help.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures
Extinguishing media
Suitable extinguishing agents

- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures
Personal precautions, protective equipment and emergency procedures Wear protective clothing.

Environmental precautions:

Dilute with plenty of water.

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

Methods and material for containment and cleaning up:

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

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage
Handling

- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

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• **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

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

9 Physical and chemical properties

• **Information on basic physical and chemical properties**

• **General Information**

• **Appearance:**

• Form:	Liquid
• Color:	Clear
• Odor:	Odorless
• Odour threshold:	Not determined.

• **pH-value at 20 °C:** 8.8

• **Change in condition**

• Melting point/Melting range:	undetermined
• Boiling point/Boiling range:	100 °C

• **Flash point:** Not applicable

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

• **Ignition temperature:**

• **Decomposition temperature:** Not determined.

• **Auto igniting:** Product is not selfigniting.

• **Danger of explosion:** Product does not present an explosion hazard.

• **Explosion limits:**

• Lower:	Not determined.
• Upper:	Not determined.

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• Vapor pressure at 20 °C:	23 hPa
• Density:	Not determined.
• Relative density	Not determined.
• Vapour density	Not determined.
• Evaporation rate	Not determined.
• Solubility in / Miscibility with Water:	Fully miscible
• Partition coefficient (n-octanol/water):	Not determined.
• Viscosity:	
• dynamic:	Not determined.
• kinematic:	Not determined.
• Solvent content:	
• Organic solvents:	0.0 %
• Water:	94.7 %
• Solids content:	5.3 %
• Other information	No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

• **Information on toxicological effects**

• **Acute toxicity:**

• **Primary irritant effect:**

• **on the skin:** No irritant effect.

• **on the eye:** No irritant effect.

• **Sensitization:** No sensitizing effects known.

• **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

• **Carcinogenic categories**

• **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

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<ul style="list-style-type: none"> NTP (National Toxicology Program) None of the ingredients is listed.
<ul style="list-style-type: none"> OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed.
<ul style="list-style-type: none"> Target organs: Not applicable.

12 Ecological information

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

13 Disposal considerations

- Waste treatment methods**
- Recommendation**
Hand over to hazardous waste disposers.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:**
- Recommendation:** Disposal must be made according to official regulations.
- Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

<ul style="list-style-type: none"> UN-Number 	<ul style="list-style-type: none"> DOT, ADR, ADN, IMDG, IATA 	<ul style="list-style-type: none"> Void
<ul style="list-style-type: none"> UN proper shipping name 	<ul style="list-style-type: none"> DOT, ADR, ADN, IMDG, IATA 	<ul style="list-style-type: none"> Void
<ul style="list-style-type: none"> Transport hazard class(es) 	<ul style="list-style-type: none"> DOT, ADR, ADN, IMDG, IATA 	<ul style="list-style-type: none"> Void
<ul style="list-style-type: none"> Class 	<ul style="list-style-type: none"> DOT, ADR, ADN, IMDG, IATA 	<ul style="list-style-type: none"> Void

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<ul style="list-style-type: none"> Packing group 	<ul style="list-style-type: none"> DOT, ADR, IMDG, IATA 	<ul style="list-style-type: none"> Void
<ul style="list-style-type: none"> Environmental hazards: 	<ul style="list-style-type: none"> Marine pollutant: 	<ul style="list-style-type: none"> No
<ul style="list-style-type: none"> Special precautions for user 	<ul style="list-style-type: none"> Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	<ul style="list-style-type: none"> Not applicable.
<ul style="list-style-type: none"> Transport/Additional information: 	<ul style="list-style-type: none"> UN "Model Regulation": 	<ul style="list-style-type: none"> Not dangerous according to the above specifications.

15 Regulatory Information

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

<ul style="list-style-type: none"> Section 302/304 (40CFR355.30 / 40CFR355.40): 	<ul style="list-style-type: none"> Section 313 (40CFR372.65):
<ul style="list-style-type: none"> None of the ingredients is listed. 	<ul style="list-style-type: none"> None of the ingredients is listed.
<ul style="list-style-type: none"> TSCA (Toxic Substances Control Act): 	<ul style="list-style-type: none"> Carcinogenic categories
<ul style="list-style-type: none"> 7732-18-5 water 7447-40-7 potassium chloride 77-86-1 Tris(hydroxymethyl)aminomethane 9002-93-1 Triton X-100 	<ul style="list-style-type: none"> EPA (Environmental Protection Agency)
<ul style="list-style-type: none"> TLV (Threshold Limit Value established by ACGIH) 	<ul style="list-style-type: none"> MAK (German Maximum Workplace Concentration)
<ul style="list-style-type: none"> None of the ingredients is listed. 	<ul style="list-style-type: none"> NIOSH-Ca (National Institute for Occupational Safety and Health)
<ul style="list-style-type: none"> National regulations 	<ul style="list-style-type: none"> Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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16 Other information

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

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

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

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

• **Date of preparation / last revision** 06/10/2015 / -

• **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)

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

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