

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 06/02/2015

Reviewed on 05/28/2015

**1 Identification**

- **Product identifier**
- **Trade name:** Reagent F
- **Catalog or product number:** 194-5361F, 194-5381
- **Application of the substance / the mixture** *In-vitro laboratory reagent or component*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547* 1(510)724-7000
- **Information department:**  
*Technical services, customer support  
TechsupportUSSD@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.*

**2 Composition/information on ingredients**

- **Chemical characterization: Substances**
- **CAS No. Description:**  
*7732-18-5 water*
- **Identification number(s):**
- **EC number:** 231-791-2
- **Additional information:** *Contains added constituents of animal origin.*
- **Chemical characterization: Mixtures**
- **Description:** *Mixture of the substances listed below with non-hazardous additions.*

**Listing of dangerous and non-hazardous components:**

7558-79-4	disodium hydrogenorthophosphate	1.0-2.5%
54-64-8	Thimerosal	.001-.01%

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

**3 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*
- **Classification system**
- **NFPA ratings (scale 0-4)**  
*Health = 0  
Fire = 0  
Reactivity = 0*

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**4 First-aid measures****· General information***Seek immediate medical advice.**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.***5 Fire-fighting measures****· Suitable extinguishing agents***CO<sub>2</sub>, 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.***· Protective equipment:** *Wear fully protective suit.***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.***· Storage****· Requirements to be met by storerooms and receptacles:** *According to product specification***· Information about storage in one common storage facility:** *Not required.***· Further information about storage conditions:** *None.***· Specific end use(s)** *No further relevant information available.***8 Exposure controls/personal protection****· Additional information about design of technical systems:** *No further data; see item 7.*

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

**54-64-8 Thimerosal**

REL (United States)	Short-term value: C 0.1 mg/m <sup>3</sup>
TLV (United States)	0.1 mg/m <sup>3</sup> Skin; BEI

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**  
Follow the usual biosafety practices for handling potentially infectious materials.
- **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
- **Body protection:** Protective work clothing.

**9 Physical and chemical properties**

**· General Information**

**· Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Odorless
<b>Odour threshold:</b>	Not determined.

· **pH-value at 20 °C:** 7-8

**· Change in condition**

<b>Melting point/Melting range:</b>	0 °C
<b>Boiling point/Boiling range:</b>	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:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

· **Vapor pressure at 20 °C:** 23 hPa

<b>Density:</b>	Not determined
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.

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· <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> <b>dynamic:</b> <b>kinematic:</b>	Not determined. Not determined.
· <b>Solvent content:</b> <b>Organic solvents:</b> <b>Water:</b>	0.0 % 97.4 %
· <b>Solids content:</b>	2.5 %
· <b>Other information</b>	No further relevant information available.

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

**11 Toxicological information**

- **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.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

- **Target organs:** Not applicable.

**12 Ecological information**

- **Aquatic toxicity:** No further relevant information available.

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- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** 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.

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
Dispose of waste in accordance to applicable national, regional, or local regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

**14 Transport information**

- |  |  |
|--|--|
| · <b>UN-Number</b>   | Void   |
| · <b>ADR, ADN, IMDG, IATA</b>  | Void   |
| · <b>UN proper shipping name</b>   | Void   |
| · <b>ADR, ADN, IMDG, IATA</b>  | Void   |
| · <b>Transport hazard class(es)</b>  | Void   |
| · <b>ADR, ADN, IMDG, IATA</b>  | Void   |
| · <b>Class</b>   | Void   |
| · <b>Packing group</b>   | Void   |
| · <b>ADR, IMDG, IATA</b>   | Void   |
| · <b>Environmental hazards:</b>  | No   |
| · <b>Marine pollutant:</b>   | No   |
| · <b>Special precautions for user</b>  | Not applicable.                                      |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>                                       | Not dangerous according to the above specifications. |

**15 Regulatory information**

- **SARA (Superfund Amendants and Reauthorization Act of 1986 - USA)**
- **Section 302/304 (40CFR355.30 / 40CFR355.40):**  
None of the ingredients is listed.

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· **Section 313 (40CFR372.65):**

54-64-8	Thimerosal
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· **TSCA (Toxic Substances Control Act):**

7558-79-4	disodium hydrogenorthophosphate
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7647-14-5	sodium chloride
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9048-46-8	Bovine Serum Albumin
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9005-64-5	Tween 20
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54-64-8	Thimerosal
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7732-18-5	water
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· **National regulations**

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

**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** 06/02/2015 / -

· **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

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

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