

KIT COMPONENTSProduct name: **TeSeE SAP Detection kit (192 tests)**Product code: **3551194**

Article number	Description	Quantity	Symbols
5194A	R1 - Microplate, 12 x 8 wells	2	
7360R	R2 - Wash Solution (Conc. 10 x), 250 ml	1	
5145B	R3 - Negative Control (4 mL)	1	GHS07
5194C	R4 - Positive Control (lyoph.), q.s. ad 4 mL	1	GHS07
5145D	R6 - Sample Diluant (35 mL)	1	GHS07
5194E	R7 - Conjugate (10x conc.), 2.8 mL	1	GHS07
7435S	R8 - Substrat Buffer (0.015% H ₂ O ₂ , 4% DMSO) (60 mL)	1	
7436J	R9 - Chromogen (TMB) (5 mL)	1	
7438L	R10 - Stop Solution (1N H ₂ SO ₄), 28 mL	1	GHS05 GHS08

Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

1 Identification· **Product identifier**

- **Trade name: R1 - Microplate, 12 x 8 wells**
 - **Article number:** 5194A
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
 - **Application of the substance / the mixture** Laboratory reagent or component.

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

Bio-Rad
3, Boulevard Raymond Poincaré
F-92430 Marnes-la-Coquette
Tel.: +33 (0)1 47 95 60 00
Fax : +33 (0)1 47 41 91 33
e-mail: fds-msds.fr@bio-rad.com

· **Information department:** Customer support.· **Emergency telephone number:**

See item 16

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-703-527-3887.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION

or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

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

· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

· **Other hazards**· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

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Trade name: R1 - Microplate, 12 x 8 wells· **vPvB:** Not applicable.

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3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
 - **Description:** Mixture without a chemical hazard.
 - **Dangerous components:** Void

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:** Immediately wash with water and soap and rinse thoroughly.
 - **After eye contact:** Rinse opened eye for several minutes under running water.
 - **After swallowing:** Consult a doctor, if necessary.
- **Information for doctor:**
 - **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
 - **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
 - **Suitable extinguishing agents:**
Use fire fighting measures that suit the environment.
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
- **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 disposable gloves.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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Trade name: R1 - Microplate, 12 x 8 wells

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7 Handling and storage

- **Handling:**
 - **Precautions for safe handling**
Avoid all contact with reagents, even those considered to be non-hazardous.
Follow good laboratory practices.
 - **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:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
 - **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
 - **Breathing equipment:** Suitable respiratory protective device recommended.
 - **Protection of hands:** Protective gloves
 - **Eye protection:** Safety glasses

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
 - **General Information**
 - **Appearance:**
 - **Form:** Solid
 - **Color:** Colorless
 - **Odor:** Odorless
 - **pH-value:** Not applicable.
 - **Change in condition**
 - **Melting point/Melting range:** Undetermined.
 - **Flash point:** Not applicable.
 - **Danger of explosion:** Product does not present an explosion hazard.
 - **Density:** Not determined.

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Trade name: R1 - Microplate, 12 x 8 wells

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- **Solubility in / Miscibility with**
 - **Water:** Insoluble.
- **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**
 - **Additional toxicological information:** The product is not subject to classification according to internally approved calculation methods for preparations:
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.

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:** Avoid transfer into the environment.
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

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Trade name: R1 - Microplate, 12 x 8 wells

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· Proposition 65

· Chemicals known to cause cancer:
None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)
None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

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

16 Other information

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

USA - Clinical Diagnostic Group
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· Department issuing SDS:
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Redmond, WA 98052-5039

Phone Number: 1-800-2BIORAD (1-800-224-6723) or (425) 881-8300 (daytime PST)

· Date of preparation / last revision 08/13/2015 / 1

· 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

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Trade name: R1 - Microplate, 12 x 8 wells

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

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

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Reviewed on 07/17/2015

1 Identification**· Product identifier****· Trade name: R2 - Wash Solution (Conc. 10 x), 250 ml****· Article number:**

7360R

5180R

· Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the mixture Laboratory reagent or component.**· Details of the supplier of the safety data sheet****· Manufacturer/Supplier:**

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3, Boulevard Raymond Poincaré

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Tel.: +33 (0)1 47 95 60 00

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e-mail: fds-msds.fr@bio-rad.com

· Information department: Customer support.**· Emergency telephone number:**

See item 16

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-703-527-3887.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION

or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

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**· Classification system:****· NFPA ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

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Trade name: R2 - Wash Solution (Conc. 10 x), 250 ml

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- **Other hazards**
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
 - **Description:** Mixture without a chemical hazard.
- **Dangerous components:**

77-86-1	trometamol	0.1-2.5%
	⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	

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:** Consult a doctor, if necessary.
- **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.
- **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 disposable gloves.
- **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.

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Trade name: R2 - Wash Solution (Conc. 10 x), 250 ml

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7 Handling and storage

- **Handling:**
 - **Precautions for safe handling**
Keep receptacles tightly sealed.
Avoid all contact with reagents, even those considered to be non-hazardous.
Follow good laboratory practices.
 - **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:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
 - **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
 - **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
 - **Breathing equipment:** Not required.
 - **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 - **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
 - **General Information**
 - **Appearance:**
 - **Form:** Fluid
 - **Color:** According to product specification
 - **Odor:** Characteristic
 - **pH-value at 20 °C (68 °F):** 7.4
 - **Change in condition**
 - **Melting point/Melting range:** Undetermined.
 - **Boiling point/Boiling range:** Undetermined.

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Trade name: R2 - Wash Solution (Conc. 10 x), 250 ml

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· Flash point:	Not applicable.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Density:	Not determined.
· Solubility in / Miscibility with	
· Water:	Fully miscible.
· Solvent content:	
· Organic solvents:	0.0 %
· Water:	78.2 %
· Solids content:	19.4 %
· 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 irritating effect.
 - **Sensitization:** Sensitizing effect by skin contact is possible with prolonged exposure.
 - **Additional toxicological information:**
The product is not subject to classification according to internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· **Carcinogenic categories**

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

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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Trade name: R2 - Wash Solution (Conc. 10 x), 250 ml

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

None of the ingredients is listed.

12 Ecological information

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

13 Disposal considerations

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

14 Transport information

- | | |
|-------------------------------------|------|
| · UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | Void |
| · Environmental hazards: | |
| · Marine pollutant: | No |

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Trade name: R2 - Wash Solution (Conc. 10 x), 250 ml

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· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

7647-14-5 sodium chloride

77-86-1 trometamol

7732-18-5 water, distilled, conductivity or of similar purity

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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

16 Other information

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

USA - Clinical Diagnostic Group
Bio-Rad Laboratories
4000 Alfred Nobel Drive

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Reviewed on 07/17/2015

Trade name: R2 - Wash Solution (Conc. 10 x), 250 ml

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Hercules, California 94547
Phone: +1(510) 724-7000

· Department issuing SDS:

SDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

· Contact:

Customer Support

Phone : +33 (0)1 47 95 61 85

USA

Bio-Rad Laboratories

6565 185th Avenue NE

Redmond, WA 98052-5039

Phone Number: 1-800-2BIORAD (1-800-224-6723) or (425) 881-8300 (daytime PST)

· Date of preparation / last revision 08/13/2015 / 3**· Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

USA

Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

1 Identification**· Product identifier**

- **Trade name: R3 - Negative Control (4 mL)**
 - **Article number:** 5145B
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
 - **Application of the substance / the mixture** Laboratory reagent or component.

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

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3, Boulevard Raymond Poincaré
F-92430 Marnes-la-Coquette
Tel.: +33 (0)1 47 95 60 00
Fax : +33 (0)1 47 41 91 33
e-mail: fds-msds.fr@bio-rad.com

· Information department: Customer support.**· Emergency telephone number:**

See item 16

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-703-527-3887.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION

or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

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

GHS07

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

· Label elements**· GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms** GHS07
- **Signal word** Warning

· Hazard-determining components of labeling:

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

· Hazard statements

May cause an allergic skin reaction.

· Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection.

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

If on skin: Wash with plenty of water.

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Trade name: R3 - Negative Control (4 mL)

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

- **Classification system:**
 - **NFPA ratings (scale 0 - 4)**
 - Health = 0
 - Fire = 0
 - Reactivity = 0
 - **HMIS-ratings (scale 0 - 4)**
 - Health = 0
 - Fire = 0
 - Reactivity = 0
- **Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
 - **Description:** Mixture containing hazardous components.

- **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)	<0.01%
	<ul style="list-style-type: none"> 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 	

4 First-aid measures

- **Description of first aid measures**
 - **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:** Immediately call a doctor.
 - **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.
- **Special hazards arising from the substance or mixture** No further relevant information available.

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Trade name: R3 - Negative Control (4 mL)

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- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

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

7 Handling and storage

- **Handling:**
 - **Precautions for safe handling**
 - Ensure good ventilation/exhaustion at the workplace.
 - Prevent formation of aerosols.
 - Follow good laboratory practices.
 - **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:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
 - **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
 - **Components with limit values that require monitoring at the workplace:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
 - Immediately remove all soiled and contaminated clothing.
 - Wash hands before breaks and at the end of work.
 - **Breathing equipment:**
 - Suitable respiratory protective device recommended.

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Trade name: R3 - Negative Control (4 mL)

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In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

· **Form:** Fluid

· **Color:** Pale

· **Odor:** Odorless

· **Change in condition**

· **Melting point/Melting range:** Undetermined.

· **Boiling point/Boiling range:** Undetermined.

· **Flash point:** Not applicable.

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

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

· **Density:** Not determined.

· **Solubility in / Miscibility with**

· **Water:** Fully miscible.

· **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 irritating effect.

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Trade name: R3 - Negative Control (4 mL)

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- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

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

- None of the ingredients is listed.

- **NTP (National Toxicology Program)**

- None of the ingredients is listed.

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

- None of the ingredients is listed.

12 Ecological information

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

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
 - **DOT, ADR, ADN, IMDG, IATA** Void

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Trade name: R3 - Negative Control (4 mL)

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· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class	Void
· Packing group · DOT, ADR, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	-

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

7647-14-5 sodium chloride

1310-73-2 sodium hydroxide

7732-18-5 water, distilled, conductivity or of similar purity

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogen categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

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Trade name: R3 - Negative Control (4 mL)

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· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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

16 Other information

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

USA - Clinical Diagnostic Group

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Hercules, California 94547

Phone: +1(510) 724-7000

- **Department issuing SDS:**

SDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

- **Contact:**

Customer Support

Phone : +33 (0)1 47 95 61 85

USA

Bio-Rad Laboratories

6565 185th Avenue NE

Redmond, WA 98052-5039

Phone Number: 1-800-2BIORAD (1-800-224-6723) or (425) 881-8300 (daytime PST)

- **Date of preparation / last revision** 08/13/2015 / 2

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

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29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

1 Identification**· Product identifier**

- **Trade name: R4 - Positive Control (lyoph.), q.s. ad 4 mL**
 - **Article number:** 5194C
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
 - **Application of the substance / the mixture** Laboratory reagent or component.

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

Bio-Rad
3, Boulevard Raymond Poincaré
F-92430 Marnes-la-Coquette
Tel.: +33 (0)1 47 95 60 00
Fax : +33 (0)1 47 41 91 33
e-mail: fds-msds.fr@bio-rad.com

· Information department: Customer support.**· Emergency telephone number:**

See item 16

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-703-527-3887.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION

or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

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

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

· Label elements**· GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms** GHS07
- **Signal word** Warning

· Hazard-determining components of labeling:

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

· Hazard statements

May cause an allergic skin reaction.

· Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection.

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

If on skin: Wash with plenty of water.

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Trade name: R4 - Positive Control (lyoph.), q.s. ad 4 mL

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

- **Classification system:**
 - **NFPA ratings (scale 0 - 4)**
 - Health = 0
 - Fire = 0
 - Reactivity = 0
 - **HMIS-ratings (scale 0 - 4)**
 - Health = 0
 - Fire = 0
 - Reactivity = 0
- **Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
 - **Description:** Mixture containing hazardous components.

- **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)	<0.01%
	<ul style="list-style-type: none">  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 	

4 First-aid measures

- **Description of first aid measures**
 - **After inhalation:** Supply fresh air and to be sure call for a doctor.
 - **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:** Immediately call a doctor.
- **Information for doctor:**
 - **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
 - **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
 - **Suitable extinguishing agents:**
Use fire fighting measures that suit the environment.
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
- **Special hazards arising from the substance or mixture** No further relevant information available.

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Reviewed on 07/17/2015

Trade name: R4 - Positive Control (lyoph.), q.s. ad 4 mL

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- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures**· Personal precautions, protective equipment and emergency procedures**

Wear protective clothing.

Wear disposable gloves.

- **Environmental precautions:** Do not allow product to reach sewage system or any water course.

- **Methods and material for containment and cleaning up:** Pick up mechanically.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage**· Handling:****· Precautions for safe handling**

Prevent formation of dust.

Follow good laboratory practices.

- **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:** No special requirements.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:** None.

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

8 Exposure controls/personal protection

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

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

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

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

· Exposure controls**· Personal protective equipment:****· General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

- **Breathing equipment:** Suitable respiratory protective device recommended.

- **Protection of hands:** Protective gloves

- **Eye protection:** Safety glasses

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Trade name: R4 - Positive Control (lyoph.), q.s. ad 4 mL

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9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

- **Form:** Fluid
- **Color:** According to product specification
- **Odor:** Weak, characteristic

· **pH-value at 20 °C (68 °F):** 7.4

· **Change in condition**

· **Melting point/Melting range:** Undetermined.

· **Flash point:** Not applicable.

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

· **Density:** Not determined.

· **Solubility in / Miscibility with**

- **Water:** Soluble.
- **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:**

· **Sensitization:** Sensitization possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

· **Carcinogenic categories**

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

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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Trade name: R4 - Positive Control (lyoph.), q.s. ad 4 mL

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· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
 - **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
 - **General notes:**
 - Avoid transfer into the environment.
 - Water hazard class 1 (Self-assessment): slightly hazardous for water
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:** Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

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

(Contd. on page 6)

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Reviewed on 07/17/2015

Trade name: R4 - Positive Control (lyoph.), q.s. ad 4 mL

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· UN "Model Regulation": -**15 Regulatory information****· Safety, health and environmental regulations/legislation specific for the substance or mixture**
· Sara**· Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

7647-14-5 | sodium chloride

1310-73-2 | sodium hydroxide

· Proposition 65**· Chemicals known to cause cancer:**

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Cancerogenity categories**· EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**16 Other information**

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

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(Contd. on page 7)

USA

Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R4 - Positive Control (lyoph.), q.s. ad 4 mL

(Contd. of page 6)

· Department issuing SDS:

SDS / FDS Administr.
Bio-Rad
Marnes-la-Coquette, France

· Contact:

Customer Support
Phone : +33 (0)1 47 95 61 85
USA
Bio-Rad Laboratories
6565 185th Avenue NE
Redmond, WA 98052-5039

Phone Number: 1-800-2BIORAD (1-800-224-6723) or (425) 881-8300 (daytime PST)

· Date of preparation / last revision 08/13/2015 / 1**· 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)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
Acute Tox. 3: Acute toxicity, Hazard Category 3
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

USA

Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

1 Identification**· Product identifier**

- **Trade name: R6 - Sample Diluant (35 mL)**
 - **Article number:** 5145D
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
 - **Application of the substance / the mixture** Laboratory reagent or component.

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

Bio-Rad
3, Boulevard Raymond Poincaré
F-92430 Marnes-la-Coquette
Tel.: +33 (0)1 47 95 60 00
Fax : +33 (0)1 47 41 91 33
e-mail: fds-msds.fr@bio-rad.com

· Information department: Customer support.**· Emergency telephone number:**

See item 16

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-703-527-3887.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION

or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

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

GHS07

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

· Label elements**· GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms** GHS07
- **Signal word** Warning

· Hazard-determining components of labeling:

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

· Hazard statements

May cause an allergic skin reaction.

· Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection.

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

If on skin: Wash with plenty of water.

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Reviewed on 07/17/2015

Trade name: R6 - Sample Diluant (35 mL)

(Contd. of page 1)

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

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**

- Health = 0

- Fire = 0

- Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**

- Health = 0

- Fire = 0

- Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.





- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture containing hazardous components.

- **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)	<0.01%
	<ul style="list-style-type: none">  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 	

4 First-aid measures

- **Description of first aid measures**

- **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:** Immediately call a doctor.

- **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.

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

(Contd. on page 3)

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Trade name: R6 - Sample Diluant (35 mL)

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- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

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

7 Handling and storage

- **Handling:**
 - **Precautions for safe handling**
 - Ensure good ventilation/exhaustion at the workplace.
 - Prevent formation of aerosols.
 - Follow good laboratory practices.
 - **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:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
 - **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
 - **Components with limit values that require monitoring at the workplace:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
 - Immediately remove all soiled and contaminated clothing.
 - Wash hands before breaks and at the end of work.
 - **Breathing equipment:**
 - Suitable respiratory protective device recommended.

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Trade name: R6 - Sample Diluant (35 mL)

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In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Eye protection: Goggles recommended during refilling.**9 Physical and chemical properties****· Information on basic physical and chemical properties****· General Information****· Appearance:**

- Form:** Fluid
- Color:** Dark orange color
- Odor:** Weak, characteristic

· Change in condition

- Melting point/Melting range:** Undetermined.
- Boiling point/Boiling range:** Undetermined.

· Flash point: Not applicable.**· Auto igniting:** Product is not selfigniting.**· Danger of explosion:** Product does not present an explosion hazard.**· Density:** Not determined.**· Solubility in / Miscibility with****· Water:** Fully miscible.**· 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 irritating effect.

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Trade name: R6 - Sample Diluant (35 mL)

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- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

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

- None of the ingredients is listed.

- **NTP (National Toxicology Program)**

- None of the ingredients is listed.

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

- None of the ingredients is listed.

12 Ecological information

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

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
 - **DOT, ADR, ADN, IMDG, IATA** Void

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Trade name: R6 - Sample Diluant (35 mL)

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· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class	Void
· Packing group · DOT, ADR, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	-

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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Trade name: R6 - Sample Diluant (35 mL)

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- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**16 Other information**

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

USA - Clinical Diagnostic Group

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- **Department issuing SDS:**

SDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

- **Contact:**

Customer Support

Phone : +33 (0)1 47 95 61 85

USA

Bio-Rad Laboratories

6565 185th Avenue NE

Redmond, WA 98052-5039

Phone Number: 1-800-2BIORAD (1-800-224-6723) or (425) 881-8300 (daytime PST)

- **Date of preparation / last revision** 08/13/2015 / 2- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

1 Identification· **Product identifier**

- **Trade name: R7 - Conjugate (10x conc.), 2.8 mL**
 - **Article number:** 5194E
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
 - **Application of the substance / the mixture** Laboratory reagent or component.

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

Bio-Rad
3, Boulevard Raymond Poincaré
F-92430 Marnes-la-Coquette
Tel.: +33 (0)1 47 95 60 00
Fax : +33 (0)1 47 41 91 33
e-mail: fds-msds.fr@bio-rad.com

· **Information department:** Customer support.· **Emergency telephone number:**

See item 16

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-703-527-3887.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION

or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

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

GHS07

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

· **Label elements**· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms** GHS07
- **Signal word** Warning

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

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

· **Hazard statements**

May cause an allergic skin reaction.

· **Precautionary statements**

Wear protective gloves/protective clothing/eye protection/face protection.

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

If on skin: Wash with plenty of water.

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Trade name: R7 - Conjugate (10x conc.), 2.8 mL

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

- **Classification system:**
 - **NFPA ratings (scale 0 - 4)**
Health = 0
Fire = 0
Reactivity = 0
 - **HMIS-ratings (scale 0 - 4)**
Health = 0
Fire = 0
Reactivity = 0
- **Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
 - **Description:**
Mixture containing hazardous components.
Contains components of animal origin.

· Dangerous components:		
56-81-5	glycerol	2.5-10%
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)	<0.01%
	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	

4 First-aid measures

- **Description of first aid measures**
 - **After inhalation:** Supply fresh air and to be sure call for a doctor.
 - **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:** Immediately call a doctor.
- **Information for doctor:**
 - **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
 - **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
 - **Suitable extinguishing agents:**
Use fire fighting measures that suit the environment.

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Trade name: R7 - Conjugate (10x conc.), 2.8 mL

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- CO2, extinguishing powder or water spray. Fight larger fires with water spray.
- **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.
 - Wear disposable gloves.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**
 - Absorb liquid components with liquid-binding material.
 - Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.

7 Handling and storage

- **Handling:**
 - **Precautions for safe handling** Follow good laboratory practices.
 - **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:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

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

56-81-5 glycerol

PEL	15* 5** mg/m ³ *total dust **respirable fraction
TLV	10* ppm *Mist

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

- **Exposure controls**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
 - Immediately remove all soiled and contaminated clothing.
 - Wash hands before breaks and at the end of work.
 - **Breathing equipment:** Suitable respiratory protective device recommended.

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Trade name: R7 - Conjugate (10x conc.), 2.8 mL

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- **Protection of hands:** Protective gloves
- **Eye protection:** Safety glasses

9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

- **Form:** Fluid
- **Color:** Red
- **Odor:** Weak, characteristic

· **pH-value at 20 °C (68 °F):** 7.1

· **Change in condition**

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Undetermined.

· **Flash point:** Not applicable.

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

· **Density:** Not determined.

· **Solubility in / Miscibility with**

- **Water:** Fully miscible.

· **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:**

- **Sensitization:** Sensitization possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

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Trade name: R7 - Conjugate (10x conc.), 2.8 mL

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· Carcinogenic categories

<p align="center">· IARC (International Agency for Research on Cancer)</p> <p>None of the ingredients is listed.</p>
<p align="center">· NTP (National Toxicology Program)</p> <p>None of the ingredients is listed.</p>
<p align="center">· OSHA-Ca (Occupational Safety & Health Administration)</p> <p>None of the ingredients is listed.</p>

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:**
 - Avoid transfer into the environment.
 - Water hazard class 1 (Self-assessment): slightly hazardous for water
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:** Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

<p>· UN-Number</p> <p>· DOT, ADR, ADN, IMDG, IATA</p>	<p>Void</p>
<p>· UN proper shipping name</p> <p>· DOT, ADR, ADN, IMDG, IATA</p>	<p>Void</p>
<p>· Transport hazard class(es)</p> <p>· DOT, ADR, ADN, IMDG, IATA</p> <p>· Class</p>	<p>Void</p>
<p>· Packing group</p> <p>· DOT, ADR, IMDG, IATA</p>	<p>Void</p>

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Trade name: R7 - Conjugate (10x conc.), 2.8 mL

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- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **National regulations:**

Class	Share in %
NK	10.0

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

USA

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Trade name: R7 - Conjugate (10x conc.), 2.8 mL

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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.

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Phone Number: 1-800-2BIORAD (1-800-224-6723) or (425) 881-8300 (daytime PST)

· Date of preparation / last revision 08/13/2015 / 1**· 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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

1 Identification· **Product identifier**

- **Trade name: R8 - Substrat Buffer (0.015% H₂O₂, 4% DMSO) (60 mL)**
 - **Article number:** 7435S
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
 - **Application of the substance / the mixture** Laboratory reagent or component.

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

Bio-Rad
3, Boulevard Raymond Poincaré
F-92430 Marnes-la-Coquette
Tel.: +33 (0)1 47 95 60 00
Fax : +33 (0)1 47 41 91 33
e-mail: fds-msds.fr@bio-rad.com

· **Information department:** Customer support.· **Emergency telephone number:**

See item 16

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-703-527-3887.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION

or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

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

· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

· **Other hazards**· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

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USA

Safety Data Sheet
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Reviewed on 07/17/2015

Trade name: R8 - Substrat Buffer (0.015% H₂O₂, 4% DMSO) (60 mL)· **vPvB:** Not applicable.

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3 Composition/information on ingredients· **Chemical characterization: Mixtures**· **Description:** Mixture containing components at a non hazardous concentration.· **Dangerous components:**

67-68-5 dimethyl sulfoxide

2.5-10%

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:** Consult a doctor, if necessary.
- **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.· **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 disposable gloves.

· **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.

USA

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Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R8 - Substrat Buffer (0.015% H2O2, 4% DMSO) (60 mL)

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7 Handling and storage

- **Handling:**
 - **Precautions for safe handling**
Keep receptacles tightly sealed.
Avoid all contact with reagents, even those considered to be non-hazardous.
Follow good laboratory practices.
 - **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:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
 - **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

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

67-68-5 dimethyl sulfoxide

WEEL	250 ppm
------	---------

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

- **Exposure controls**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
 - **Breathing equipment:** Suitable respiratory protective device recommended.
 - **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 - **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

- **Form:** Fluid
- **Color:** Colorless
- **Odor:** Weak, characteristic

· **Change in condition**

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Undetermined.

· **Flash point:** Not applicable.

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Safety Data Sheet
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Reviewed on 07/17/2015

Trade name: R8 - Substrat Buffer (0.015% H2O2, 4% DMSO) (60 mL)

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· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Density:	Not determined.
· Solubility in / Miscibility with · Water:	Fully miscible.
· Solvent content: · VOC content:	3.9 %
· 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 irritating effect.
 - **Sensitization:** No sensitizing effects known.
 - **Additional toxicological information:**
The product is not subject to classification according to internally approved calculation methods for preparations:
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)	
7722-84-1 hydrogen peroxide solution	3
· NTP (National Toxicology Program)	
None of the ingredients is listed.	
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	

USA

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Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R8 - Substrat Buffer (0.015% H2O2, 4% DMSO) (60 mL)

(Contd. of page 4)

12 Ecological information

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

13 Disposal considerations

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

14 Transport information

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

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Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R8 - Substrat Buffer (0.015% H2O2, 4% DMSO) (60 mL)

(Contd. of page 5)

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

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

7722-84-1 | hydrogen peroxide solution

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogen categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

7722-84-1 | hydrogen peroxide solution

A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **National regulations:**

Class	Share in %
NK	3.9

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

16 Other information

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

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Phone: +1(510) 724-7000

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Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R8 - Substrat Buffer (0.015% H2O2, 4% DMSO) (60 mL)

(Contd. of page 6)

· Department issuing SDS:SDS / FDS Administr.
Bio-Rad
Marnes-la-Coquette, France**· Contact:**Customer Support
Phone : +33 (0)1 47 95 61 85
USA
Bio-Rad Laboratories
6565 185th Avenue NE
Redmond, WA 98052-5039

Phone Number: 1-800-2BIORAD (1-800-224-6723) or (425) 881-8300 (daytime PST)

· Date of preparation / last revision 08/13/2015 / 2**· Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

USA

Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

1 Identification· **Product identifier**

- **Trade name: R9 - Chromogen (TMB) (5 mL)**
 - **Article number:** 7436J
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
 - **Application of the substance / the mixture** Laboratory reagent or component.

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

Bio-Rad
3, Boulevard Raymond Poincaré
F-92430 Marnes-la-Coquette
Tel.: +33 (0)1 47 95 60 00
Fax : +33 (0)1 47 41 91 33
e-mail: fds-msds.fr@bio-rad.com

· **Information department:** Customer support.· **Emergency telephone number:**

See item 16

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-703-527-3887.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION

or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

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

· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

· **Other hazards**· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

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USA

Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R9 - Chromogen (TMB) (5 mL)· **vPvB:** Not applicable.

(Contd. of page 1)

3 Composition/information on ingredients· **Chemical characterization: Mixtures**

- **Description:** Mixture containing components at a non hazardous concentration.
- **Dangerous components:** Void

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:** Consult a doctor, if necessary.
- **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.
- **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 disposable gloves.
- **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.

7 Handling and storage· **Handling:**

- **Precautions for safe handling**
Keep receptacles tightly sealed.

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USA

Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R9 - Chromogen (TMB) (5 mL)

(Contd. of page 2)

Avoid all contact with reagents, even those considered to be non-hazardous.
Follow good laboratory practices.

- **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:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
 - **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
 - **Breathing equipment:** Suitable respiratory protective device recommended.
 - **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 - **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

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

· **General Information**

- **Appearance:**
 - **Form:** Fluid
 - **Color:** Colorless
 - **Odor:** Odorless

· **Change in condition**

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Undetermined.

· **Flash point:** Not applicable.

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

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

· **Density:** Not determined.

· **Solubility in / Miscibility with**

- **Water:** Fully miscible.

(Contd. on page 4)

Safety Data Sheet
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Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R9 - Chromogen (TMB) (5 mL)

(Contd. of page 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 irritating effect.
 - **Sensitization:** No sensitizing effects known.
 - **Additional toxicological information:**
The product is not subject to classification according to internally approved calculation methods for preparations:
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.

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 (Self-assessment): slightly hazardous for water

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Safety Data Sheet
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Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R9 - Chromogen (TMB) (5 mL)

(Contd. of page 5)

· Section 313 (Specific toxic chemical listings):
None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

54827-17-7	3,3',5,5'-tetramethylbenzidine
7732-18-5	water, distilled, conductivity or of similar purity

· Proposition 65

· Chemicals known to cause cancer:
None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)
None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

· National regulations:

Class	Share in %
I	0.2

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

16 Other information

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

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4000 Alfred Nobel Drive
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· Department issuing SDS:
SDS / FDS Administr.
Bio-Rad
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(Contd. on page 7)

Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R9 - Chromogen (TMB) (5 mL)

(Contd. of page 6)

Phone Number: 1-800-2BIORAD (1-800-224-6723) or (425) 881-8300 (daytime PST)

· **Date of preparation / last revision** 08/13/2015 / 2· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

USA

Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

1 Identification· **Product identifier**

- **Trade name: R10 - Stop Solution (1N H₂SO₄), 28 mL**
 - **Article number:** 7438L
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
 - **Application of the substance / the mixture** Laboratory reagent or component.

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

Bio-Rad
3, Boulevard Raymond Poincaré
F-92430 Marnes-la-Coquette
Tel.: +33 (0)1 47 95 60 00
Fax : +33 (0)1 47 41 91 33
e-mail: fds-msds.fr@bio-rad.com

· **Information department:** Customer support.· **Emergency telephone number:**

See item 16

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-703-527-3887.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION

or ACCIDENT with this product.

This SDS is listed with CHEMTREC 1-800-424-9300 / 1-510-741-1000.

Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT with this product.

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

GHS08 Health hazard

Carc. 1A H350 May cause cancer.



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

· **Label elements**· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms** GHS05, GHS08
- **Signal word** Danger

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

sulphuric acid

· **Hazard statements**

Causes severe skin burns and eye damage.

May cause cancer.

(Contd. on page 2)

USA

Safety Data Sheet

29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R10 - Stop Solution (1N H₂SO₄), 28 mL

(Contd. of page 1)

- **Precautionary statements**

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Rinse mouth. Do NOT induce vomiting.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

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

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**

Health = 1

Fire = 0

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**

Health = 1

Fire = 0

Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture containing hazardous components.

- **Dangerous components:**

7664-93-9	sulphuric acid	Carc. 1A, H350 Met. Corr.1, H290; Skin Corr. 1A, H314	2.5-10%
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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:** Immediately wash with water and soap and rinse thoroughly.

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

- **After swallowing:** Consult a doctor, if necessary.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed**

No further relevant information available.

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

No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

Use fire fighting measures that suit the environment.

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Safety Data Sheet
29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R10 - Stop Solution (1N H₂SO₄), 28 mL

(Contd. of page 2)

- CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
- **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 disposable gloves.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb liquid components with liquid-binding material.
Use neutralizing agent.
- **Reference to other sections** No dangerous substances are released.

7 Handling and storage

- **Handling:**
 - **Precautions for safe handling** Follow good laboratory practices.
 - **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:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

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

7664-93-9 sulphuric acid

PEL	1 mg/m ³
REL	1 mg/m ³
TLV	0.2 T mg/m ³

· **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:** Suitable respiratory protective device recommended.
 - **Protection of hands:** Protective gloves

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Safety Data Sheet
29 CFR Part 1910.1200

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Reviewed on 07/17/2015

Trade name: R10 - Stop Solution (1N H₂SO₄), 28 mL

(Contd. of page 3)

- **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

- **Form:** Fluid
- **Color:** Colorless
- **Odor:** Weak, characteristic

· **pH-value at 20 °C (68 °F):** < 2

· **Change in condition**

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Undetermined.

· **Flash point:** Not applicable.

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

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

· **Density:** Not determined.

· **Solubility in / Miscibility with**

· **Water:** Fully miscible.

· **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**

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Corrosive

· **Carcinogenic categories**

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

7664-93-9 sulphuric acid

1

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Trade name: R10 - Stop Solution (1N H₂SO₄), 28 mL

(Contd. of page 4)

· NTP (National Toxicology Program)	
7664-93-9 sulphuric acid	K
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	

12 Ecological information

- **Toxicity**
 - **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
 - **General notes:** Avoid transfer into the environment.
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

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

14 Transport information

· UN-Number	
· DOT	UN2796
· ADR, IMDG, IATA	2796
· UN proper shipping name	
· ADR	2796 SULPHURIC ACID
· IMDG, IATA	SULPHURIC ACID
· Transport hazard class(es)	
· DOT	
· Class	8 Corrosive substances

(Contd. on page 6)

Safety Data Sheet

29 CFR Part 1910.1200

Printing date 08/13/2015

Reviewed on 07/17/2015

Trade name: R10 - Stop Solution (1N H₂SO₄), 28 mL

(Contd. of page 6)

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Cancerogenity categories
· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

7664-93-9	sulphuric acid	A2
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· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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

16 Other information

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

USA - Clinical Diagnostic Group

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· Department issuing SDS:

SDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

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Phone : +33 (0)1 47 95 61 85

USA

Bio-Rad Laboratories

6565 185th Avenue NE

Redmond, WA 98052-5039

Phone Number: 1-800-2BIORAD (1-800-224-6723) or (425) 881-8300 (daytime PST)

· Date of preparation / last revision 08/13/2015 / 2

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

Met. Corr. 1: Corrosive to metals, Hazard Category 1

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Carc. 1A: Carcinogenicity, Hazard Category 1A