

KIT COMPONENTS

Product name: VINEO™ Unstable Proteins (100 Tests)
Product code: 3548121

Article number	Description	Quantity	Symbols
4812A	R1 - Test Strip	100	
4812B	R2 - 20 x Conc. Wash Solution (250 ml)	1	GHS07
4811C	R3 - Negative control (0.55 ml)	1	GHS07
4811D	R4 - Positive Control (0.55 ml)	1	GHS07 GHS08
4812C	R5 - Saturation Solution (220 ml)	3	GHS07
4812D	R6 - Primary Antibodies (5 ml)	1	
4812E	R7 - Secondary Antibodies (5 ml)	1	
4812F	R8 - Colour development solution (115 ml)	4	





Printing date 08/06/2015

Reviewed on 08/06/2015

1 Identification

- · Product identifier
 - · Trade name: R1 Test Strip
 - · Article number: 4812A
 - · 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.

(Contd. on page 2)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R1 - Test Strip

· 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

- $\cdot \ \textbf{Extinguishing media} \\$
 - · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray. Use fire fighting measures that suit the environment.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
 - · Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear 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.

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(Contd. on page 3)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R1 - Test Strip

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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:

· pH-value:

· Form: Web· Color: White· Odor: Odorless

- · Change in condition
 - · Melting point/Melting range: Undetermined.
- · Flash point: Not applicable.

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

Not applicable.

· **Density:** Not determined.

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Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R1 - Test Strip

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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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Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R1 - Test Strip

· Other adverse effects No further relevant information available.

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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.
 - · 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
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of 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):

None of the ingredients is listed.

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Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R1 - Test Strip

· Proposition 65

(Contd. of page 5)

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

Bio-Rad Laboratories

4000 Alfred Nobel Drive

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 08/06/2015 / 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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Safety Data Sheet 29 CFR Part 1910.1200

Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R1 - Test Strip

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CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

USA





Printing date 08/06/2015

Reviewed on 08/06/2015

1 Identification

- · Product identifier
 - · Trade name: R2 20 x Conc. Wash Solution (250 ml)
 - · Article number: 4812B
 - · 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.

(Contd. on page 2)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R2 - 20 x Conc. Wash Solution (250 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 = 0Fire = 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:		
77-86-1	trometamol Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	0.1-2.5%
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; 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: 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. Use fire fighting measures that suit the environment.

(Contd. on page 3)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R2 - 20 x Conc. Wash Solution (250 ml)

(Contd. of page 2)

- 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.

· 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 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:
 - \cdot General protective and hygienic measures:

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

USA -





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R2 - 20 x Conc. Wash Solution (250 ml)

(Contd. of page 3)

9 Physical and chemical properties

· Information on basic physical and chemical properties

General Information

· Appearance:

Form: FluidColor: ColorlessOdor: uncharacteristic

· pH-value at 20 °C (68 °F): 7.4

· 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:
 - · 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.

(Contd. on page 5)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R2 - 20 x Conc. Wash Solution (250 ml)

(Contd. of page 4)

· 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 be specially treated adhering to official regulations.
- · Uncleaned packagings:
 - · Recommendation: Disposal must be made according to official regulations.

4 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 MARPOL73/78 and the IBC Code	II of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications
	(Contd. on page

- USA





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R2 - 20 x Conc. Wash Solution (250 ml)

(Contd. of page 5)

· 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

9005-64-5 TWEEN 20

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.

· 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

Hercules, California 94547

Phone: +1(510) 724-7000

(Contd. on page 7)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R2 - 20 x Conc. Wash Solution (250 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 08/06/2015 / 2

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

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

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

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

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

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

USA





Printing date 08/06/2015 Reviewed on 07/19/2015

1 Identification

- · Product identifier
 - · Trade name: R3 Negative control (0.55 ml)
 - · Article number: 4811C
 - · 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.

(Contd. on page 2)





Printing date 08/06/2015 Reviewed on 07/19/2015

Trade name: R3 - Negative control (0.55 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] <0.01% and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

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

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:

CO2, extinguishing powder or water spray. Fight larger fires with water spray. Use fire fighting measures that suit the environment.

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

(Contd. on page 3)





Printing date 08/06/2015 Reviewed on 07/19/2015

Trade name: R3 - Negative control (0.55 ml)

(Contd. of page 2)

- · 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.

· 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 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

USA ·





Printing date 08/06/2015 Reviewed on 07/19/2015

Trade name: R3 - Negative control (0.55 ml)

(Contd. of page 3)

9 Physical and chemical properties

· Information on basic physical and chemical properties

General Information

· Appearance:

Form: Fluid
Color: Colorless
Odor: Like alcohol
Odour threshold: Not determined.

· pH-value: Not determined.

· 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
 - \cdot 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:

İrritant

· 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.

(Contd. on page 5)





Printing date 08/06/2015 Reviewed on 07/19/2015

Trade name: R3 - Negative control (0.55 ml)

(Contd. of page 4)

· 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 be specially treated adhering to official regulations.
- · Uncleaned packagings:
 - · Recommendation: Disposal must be made according to official regulations.

4 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 MARPOL73/78 and the IBC Code	II of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications
	(Contd. on page

USA





Printing date 08/06/2015 Reviewed on 07/19/2015

Trade name: R3 - Negative control (0.55 ml)

(Contd. of page 5)

· 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):

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.

· 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

Hercules, California 94547

Phone: +1(510) 724-7000

· Department issuing SDS:

SDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

(Contd. on page 7)



Page 7/7

Safety Data Sheet 29 CFR Part 1910.1200

Printing date 08/06/2015 Reviewed on 07/19/2015

Trade name: R3 - Negative control (0.55 ml)

(Contd. of page 6)

· 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 08/06/2015 / 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





Printing date 08/06/2015

Reviewed on 07/19/2015

1 Identification

- · Product identifier
 - · Trade name: R4 Positive Control (0.55 ml)
 - · Article number: 4811D
 - · 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.



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, GHS08
- Signal word Danger
- · Hazard-determining components of labeling:

ethano

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)

(Contd. on page 2)





Printing date 08/06/2015 Reviewed on 07/19/2015

Trade name: R4 - Positive Control (0.55 ml)

(Contd. of page 1)

· Hazard statements

May cause an allergic skin reaction.

May cause cancer.

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.

Store locked up.

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 = 0Fire = 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.

2 compension mixture containing nazaraeae compensione.		
· Dangerous components:		
64-17-5	L	10-25%
	♦ Flam. Liq. 2, H225♦ Carc. 1A, H350	
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.

(Contd. on page 3)





Printing date 08/06/2015 Reviewed on 07/19/2015

Trade name: R4 - Positive Control (0.55 ml)

(Contd. of page 2)

· 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.

Use fire fighting measures that suit the environment.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
 - · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

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.

· 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 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:

64-17-5 ethanol

PEL | 1900 mg/m³, 1000 ppm REL | 1900 mg/m³, 1000 ppm

(Contd. on page 4)





Printing date 08/06/2015 Reviewed on 07/19/2015

Trade name: R4 - Positive Control (0.55 ml)

(Contd. of page 3)

TLV | Short-term value: 1880 mg/m³, 1000 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:

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

9 Physical and chemical properties

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

Form: FluidColorlessOdor: Like alcohol

· pH-value: Not determined.

· 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.

USA ·

(Contd. on page 5)





Printing date 08/06/2015 Reviewed on 07/19/2015

Trade name: R4 - Positive Control (0.55 ml)

(Contd. of page 4)

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.

· 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 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

(Contd. on page 6)





Printing date 08/06/2015 Reviewed on 07/19/2015

Trade name: R4 - Positive Control (0.55 ml)

	(Contd. of page
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATAClass	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 MARPOL73/78 and the IBC Code 	II of 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):

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.

(Contd. on page 7)





Printing date 08/06/2015 Reviewed on 07/19/2015

Trade name: R4 - Positive Control (0.55 ml)

(Contd. of page 6)

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

None of the ingredients is listed.

· National regulations:

Class	Share in %
NK	13.0

· 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 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 08/06/2015 / 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)

Flam. Liq. 2: Flammable liquids, Hazard Category 2

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

Carc. 1A: Carcinogenicity, Hazard Category 1A

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

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





Printing date 08/06/2015

Reviewed on 08/06/2015

1 Identification

- · Product identifier
 - · Trade name: R5 Saturation Solution (220 ml)
 - · Article number: 4812C
 - · 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.

(Contd. on page 2)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R5 - Saturation Solution (220 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] <0.01% and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

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

4 First-aid measures

- · Description of first aid measures
 - · 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: 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. Use fire fighting measures that suit the environment.

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

(Contd. on page 3)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R5 - Saturation Solution (220 ml)

(Contd. of page 2)

· 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.

· 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

Keep receptacles tightly sealed.

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:

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

USA





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R5 - Saturation Solution (220 ml)

(Contd. of page 3)

9 Physical and chemical properties

· Information on basic physical and chemical properties

General Information

· Appearance:

Form: FluidColor: WhitishOdor: Odorless

• **pH-value:** 8.2 ± 0.1

· 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:
 - · Carcinogenic categories
 - · IARC (International Agency for Research on Cancer)

7647-01-0 hydrochloric acid

3

· NTP (National Toxicology Program)

None of the ingredients is listed.

(Contd. on page 5)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R5 - Saturation Solution (220 ml)

(Contd. of page 4)

· 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 be specially treated adhering to official regulations.
- · Uncleaned packagings:
 - · Recommendation: Disposal must be made according to official regulations.

UN-Number	\/-:-I
· 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	r Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications

- USA





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R5 - Saturation Solution (220 ml)

(Contd. of page 5)

· 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):

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.

- · 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

Die Ded Leberatories

Bio-Rad Laboratories 4000 Alfred Nobel Drive

Hercules, California 94547

Phone: +1(510) 724-7000

(Contd. on page 7)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R5 - Saturation Solution (220 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 08/06/2015 / 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





Printing date 08/06/2015

Reviewed on 08/06/2015

1 Identification

- · Product identifier
 - · Trade name: R6 Primary Antibodies (5 ml)
 - · Article number: 4812D
 - · 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.

(Contd. on page 2)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R6 - Primary Antibodies (5 ml)

(Contd. of page 1)

· vPvB: Not applicable.

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: 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:

CO2, extinguishing powder or water spray. Fight larger fires with water spray. Use fire fighting measures that suit the environment.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
 - · Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear 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.

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.





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R6 - Primary Antibodies (5 ml)

(Contd. of page 2)

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: 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: SolutionColor: Light yellowOdor: uncharacteristic

· pH-value: Not determined.

- · 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.

(Contd. on page 4)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R6 - Primary Antibodies (5 ml)

(Contd. of page 3)

· **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:
 - · LD/LC50 values that are relevant for classification:

26628-22-8 Sodium Azide

Oral LD50 27 mg/kg (rat)
Dermal LD50 20 mg/kg (rabbit)

· 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.

(Contd. on page 5)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R6 - Primary Antibodies (5 ml)

(Contd. of page 4)

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

14 Transport information	
· UN-Number · DOT, 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 MARPOL73/78 and the IBC Code	II of 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):	
26628-22-8 Sodium Azide	
	(Contd. on page 6)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R6 - Primary Antibodies (5 ml)

	(Contd. of page 5)		
· Se	· Section 313 (Specific toxic chemical listings):		
26628-22-8	26628-22-8 Sodium Azide		
· TSCA	· TSCA (Toxic Substances Control Act):		
7647-14-5	sodium chloride		
77-86-1	trometamol		
26628-22-8	Sodium Azide		
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)

26628-22-8 | Sodium Azide

A4

· 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

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

(Contd. on page 7)



Page 7/7

Safety Data Sheet 29 CFR Part 1910.1200

Reviewed on 08/06/2015 Printing date 08/06/2015

Trade name: R6 - Primary Antibodies (5 ml)

(Contd. of page 6)

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 08/06/2015 / 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent





Printing date 08/06/2015

Reviewed on 08/06/2015

1 Identification

- · Product identifier
 - · Trade name: R7 Secondary Antibodies (5 ml)
 - · Article number: 4812E
 - · 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.

(Contd. on page 2)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R7 - Secondary Antibodies (5 ml)

(Contd. of page 1)

· vPvB: Not applicable.

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: 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:

CO2, extinguishing powder or water spray. Fight larger fires with water spray. Use fire fighting measures that suit the environment.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
 - · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear disposable gloves.

· Environmental precautions:

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

Dilute with plenty of water.

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

· Methods and material for containment and cleaning up:

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

· Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Contd. on page 3)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R7 - Secondary Antibodies (5 ml)

(Contd. of page 2)

See Section 13 for disposal information.

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: 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: FluidColor: Clear

Odor: uncharacteristicOdour threshold: Not determined.

· **pH-value**: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.

(Contd. on page 4)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R7 - Secondary Antibodies (5 ml)

	(Contd. of page
· Boiling point/Boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· Water:	Fully miscible.
· Partition coefficient (n-octanol/wa	ater): Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic:	Not determined.
· 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:
 - · LD/LC50 values that are relevant for classification:

26628-22-8 Sodium Azide		
		27 mg/kg (rat)
Dermal	LD50	20 mg/kg (rabbit)

(Contd. on page 5)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R7 - Secondary Antibodies (5 ml)

(Contd. of page 4)

- · 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

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R7 - Secondary Antibodies (5 ml)

(Contd. of page 5)

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 MARPOL73/78 and the IBC Code 	II of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

· Section 355 (extremely hazardous substances):		
26628-22-8 Sodium Azide		
· Section 313 (Specific toxic chemical listings):		
26628-22-8	26628-22-8 Sodium Azide	
TSCA (Toxic Substances Control Act):		
7647-14-5	sodium chloride	
77-86-1	trometamol	
26628-22-8	Sodium Azide	
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.

(Contd. on page 7)





Printing date 08/06/2015 Reviewed on 08/06/2015

Trade name: R7 - Secondary Antibodies (5 ml)

(Contd. of page 6)

· Cancerogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

26628-22-8 Sodium Azide

Α4

· 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 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 08/06/2015 / 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent





Printing date 08/06/2015

Reviewed on 08/06/2015

1 Identification

- · Product identifier
 - · Trade name: R8 Colour development solution (115 ml)
 - · Article number: 4812F
 - · Relevant identified uses of the substance or mixture and uses advised against
 - · Process category PROC15 Use as laboratory reagent
 - 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: R8 - Colour development solution (115 ml)

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· **vPvB:** Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
 - · **Description:** Mixture containing components at a non hazardous concentration.
 - · 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: 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:

CO2, extinguishing powder or water spray. Fight larger fires with water spray. Use fire fighting measures that suit the environment.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
 - · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear 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.

· 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.

USA -





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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: 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: Fluid
 Color: Yellow
 Odor: Odorless

• **pH-value:** 9.5 ± 0.1

- · 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.

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· **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 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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· 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.
 - · 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
· Special precautions for user	Not applicable.
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of 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

Julia			
· Se	· Section 355 (extremely hazardous substances):		
26628-22-8	Sodium Azide		
· Se	Section 313 (Specific toxic chemical listings):		
26628-22-8	Sodium Azide		
· TSCA	· TSCA (Toxic Substances Control Act):		
77-86-1	trometamol		
7647-14-5	sodium chloride		
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26628-22-8	Sodium Azide
298-83-9	5,5'-diphenyl-3,3'-bis(4-nitrophenyl)-2,2'-(3,3'-dimethoxybiphenyl-4,4'-ylene) ditetrazolium dichloride
7732-18-5	water, distilled, conductivity or of similar purity
_	1.1

· 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)

26628-22-8 | Sodium Azide

A4

· 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 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 08/06/2015 / 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)

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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