

KIT COMPONENTS

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

Article number	Description	Quantity	Symbols
5194A	R1 - Microplate, 12 x 8 wells	2	
7360R	R2 - Wash Solution (Conc. 10 x), 250 ml	1	
5145B	R3 - Negative Control (4 mL)	1	GHS07
5194C	R4 - Positive Control (lyoph.), g.s. ad 4 mL	1	GHS07
5145D	R6 - Sample Diluant (35 mL)	1	GHS07
5194E	R7 - Conjugate (10x conc.), 2.8 mL	1	GHS07
7435S	R8 - Substrat Buffer (0.015% H2O2, 4% DMSO) (60 mL)	1	
7436J	R9 - Chromogen (TMB) (5 mL)	1	
7438L	R10 - Stop Solution (1Ń H₂SO₄), 28 mL	1	GHS05 GHS08



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Safety Data Sheet according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

1 Identification

- · Product identifier
 - · Trade name: R1 Microplate, 12 x 8 wells
 - · Article number: 5194A
 - 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 92430 Marnes-la-Coquette Phone: +33 (0)1 47 95 60 00 Fax: +33 (0)1 47 41 91 33 e-mail: fds-msds.fr@bio-rad.com

Bio-Rad laboratories (Canada) Ltd. 2403 Guénette Montreal, Montréal (Québec) H4R 2E9 Phone: (800) 361-1808

Fax: (514) 334-0872

· Information department: Customer support. · Emergency telephone number: See item 16

2 Hazard 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 = 0Fire = 0Reactivity = 0



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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R1 - Microplate, 12 x 8 wells

(Contd. of page 1)

3 Composition/Information on ingredients

· Chemical characterization: Mixtures

· **Description:** Mixture without a chemical hazard.

· Dangerous components: Void

4 First-aid measures

- · Description of first aid measures
 - · General information: No special measures required.
 - · After inhalation: Supply fresh air; consult doctor in case of complaints.
 - · After skin contact: Immediately wash with water and soap and rinse thoroughly.
 - · After eye contact: Rinse opened eye for several minutes under running water.
 - · After swallowing: Consult a doctor, if necessary.
 - · Information for doctor:
 - · Most important symptoms and effects, both acute and delayed No further relevant information available.
 - · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
 - Suitable extinguishing agents:

Use fire fighting measures that suit the environment.

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear disposable gloves.
- Environmental precautions: Do not allow product to reach sewage system or any water course.
- Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.



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Safety Data Sheet according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R1 - Microplate, 12 x 8 wells

(Contd. of page 2)

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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.
- · 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: SolidColor: ColorlessOdor: Odorless

· **pH-value:** Not applicable.

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

(Contd. on page 4)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R1 - Microplate, 12 x 8 wells

(Contd. of page 3)

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

· **Density:** Not determined.

· Solubility in / Miscibility with

· Water: Insoluble.

• Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
 - · 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.

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.

(Contd. on page 5)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R1 - Microplate, 12 x 8 wells

(Contd. of page 4)

- · 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.

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

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.

(Contd. on page 6)

- CDN





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R1 - Microplate, 12 x 8 wells

(Contd. of page 5)

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

None of the ingredients is listed.

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

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.

· Department issuing SDS:

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

· Contact:

Customer Support

Phone: +33 (0)1 47 95 62 77

Customer Support

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

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative





according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

1 Identification

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

7360R 5180R

- · 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 92430 Marnes-la-Coquette Phone: +33 (0)1 47 95 60 00 Fax: +33 (0)1 47 41 91 33

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

Bio-Rad laboratories (Canada) Ltd. 2403 Guénette Montreal, Montréal (Québec) H4R 2E9 Phone: (800) 361-1808

Phone: (800) 361-1808 Fax: (514) 334-0872

· Information department: Customer support. · Emergency telephone number: See item 16

2 Hazard 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 = 0Fire = 0Reactivity = 0



Safety Data Sheet according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 1)

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3 Composition/Information on ingredients

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

Tris(hydroxymethyl)-aminomethane

0.5-1.5% w/w *

Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H335

* Actual concentration ranges are withheld as a trade secret.

4 First-aid measures

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

5 Fire-fighting measures

- Extinguishing media
 - Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear disposable gloves.
- · Environmental precautions:

Dilute with plenty of water.

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

· Methods and material for containment and cleaning up:

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

· Reference to other sections No dangerous substances are released.



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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R2 - Wash Solution (Conc. 10 x), 250 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.
- · Personal protective equipment:
 - · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- Breathing equipment: Not required.
- Protection of hands:

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

· Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

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

· Form: Fluid

· Color: According to product specification

· Odor: Characteristic

• pH-value at 20 °C: 7.4

· Change in condition

· Melting point/Melting range: Undetermined.

(Contd. on page 4)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

		(Contd. of page
· Boiling point/Boiling	range: Undetermined.	
· Flash point:	Not applicable.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Density:	Not determined.	
· Solubility in / Miscibility	with	
· Water:	Fully miscible.	
· Solvent content:		
· Organic solvents:	0.0 %	
· Water:	78.2 %	
· Solids content:	19.4 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
 - · Chemical stability
 - Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:
 - · Primary irritant effect:
 - · on the skin: No irritant effect.
 - on the eye: No irritating effect.
 - · Sensitization: Sensitizing effect by skin contact is possible with prolonged exposure.
 - · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

(Contd. on page 5)





according to HPR, Schedule 1

Reviewed on 07/17/2015 Printing date 11/01/2020

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

(Contd. of page 4)

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
 - · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
 - · Bioaccumulative potential No further relevant information available.
 - · Mobility in soil No further relevant information available.
- · Additional ecological information:
 - **General notes:**

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

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

- · Results of PBT and vPvB assessment
 - · **PBT**: Not applicable.
 - vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
 - Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

14 Transport information · UN-Number · DOT/TDG, ADR, ADN, IMDG, IATA Void · UN proper shipping name DOT/TDG, ADR, ADN, IMDG, IATA Void · Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class Void (Contd. on page 6)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

	(Contd. of page
Packing group DOT/TDG, 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	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Void

15 Regulatory information

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

· S	ection 355 (extremely hazardous substances):
None of the	e ingredient is listed.
· S	ection 313 (Specific toxic chemical listings):
None of the	e ingredients is listed.
· TSC	A (Toxic Substances Control Act):
7647-14-5	sodium chloride
	Tris(hydroxymethyl)-aminomethane

Canadian substance listings:

· C	anadian Domestic Substances List (DSL)
7647-14-5	sodium chloride
	Tris(hydroxymethyl)-aminomethane
7732-18-5	water, distilled, conductivity or of similar purity
· C	anadian Ingredient Disclosure list (limit 0.1%)
None of the	e ingredients is listed.

i the ingredients is listed.

Canadian Ingredient Disclosure list (limit 1%)

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

None of the ingredients is listed.

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

16 Other information

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

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 6)

· Department issuing SDS:

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

· Contact:

Customer Support

Phone: +33 (0)1 47 95 62 77

Customer Support

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

· Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative





according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

1 Identification

- · Product identifier
 - · Trade name: R3 Negative Control (4 mL)
 - · Article number: 5145B
 - · 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 92430 Marnes-la-Coquette Phone: +33 (0)1 47 95 60 00 Fax: +33 (0)1 47 41 91 33 e-mail: fds-msds.fr@bio-rad.com

Bio-Rad laboratories (Canada) Ltd. 2403 Guénette Montreal, Montréal (Québec) H4R 2E9 Phone: (800) 361-1808

Phone: (800) 361-1808 Fax: (514) 334-0872

· Information department: Customer support. · Emergency telephone number: See item 16

2 Hazard identification

· Classification of the substance or mixture



Skin Sensitizer - Category 1 H317 May cause an allergic skin reaction.

Aquatic Acute 3 H402 Harmful to aquatic life.

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

- · 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.

Harmful to aquatic life.

Harmful to aquatic life with long lasting effects.

(Contd. on page 2)



(Contd. of page 1)



Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R3 - Negative Control (4 mL)

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapours/spray.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

Wear protective gloves.

If on skin: Wash with plenty of soap and water.

Take off contaminated clothing and wash it before reuse.

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

Specific treatment (see on this label).

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

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] ≤0.1% w/w and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

- Acute Toxicity (Oral) Category 3, H301; Acute Toxicity (Dermal) Category 2, H310; Acute Toxicity (Inhalation) Category 2, H330
- Skin Corrosion Category 1C, H314; Serious Eye Damage Category 1, H318
- Aquatic Acute 1, H400; Aquatic Chronic 1, H410
- Skin Sensitizer Category 1A, H317

4 First-aid measures

- Description of first aid measures
 - · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Immediately call a doctor.
- · Information for doctor:
 - · Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)



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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R3 - Negative Control (4 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.

- · 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 to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

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

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
 - · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Follow good laboratory practices.

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

CDN

(Contd. on page 4)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R3 - Negative Control (4 mL)

(Contd. of page 3)

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.
- · 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.

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

Protection of hands:

Protective gloves

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

· Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

 Information on ba 	sic physica	I and chemica	l properties
---------------------------------------	-------------	---------------	--------------

- · General Information
 - · Appearance:

· Form: Fluid
· Color: Pale
· Odor: Odorless

· Change in condition

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

· Flash point: Not applicable.

Auto igniting: Product is not selfigniting.

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

· **Density:** Not determined.

· Solubility in / Miscibility with

· Water: Fully miscible.

• Other information No further relevant information available.



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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R3 - Negative Control (4 mL)

(Contd. of page 4)

10 Stability and reactivity

- · Reactivity No further relevant information available.
 - · Chemical stability
 - Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:
 - · Primary irritant effect:
 - · on the skin: No irritant effect.
 - on the eye: No irritating effect.
 - · Sensitization: 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.

12 Ecological information

- · Toxicity
 - · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
 - · Bioaccumulative potential No further relevant information available.
 - · Mobility in soil No further relevant information available.
- Additional ecological information:
 - · General notes:

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

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

- · Results of PBT and vPvB assessment
 - · PBT: Not applicable.

(Contd. on page 6)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R3 - Negative Control (4 mL)

(Contd. of page 5)

- · **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
 - · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

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

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.

(Contd. on page 7)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R3 - Negative Control (4 mL)

	(Contd. of page 6)
· TSC	A (Toxic Substances Control Act):
7647-14-5	sodium chloride
1310-73-2	sodium hydroxide
7732-18-5	water, distilled, conductivity or of similar purity
· Can	adian substance listings:
· C	anadian Domestic Substances List (DSL)
7647-14-5	sodium chloride
1310-73-2	sodium hydroxide
7732-18-5	water, distilled, conductivity or of similar purity
· C	anadian Ingredient Disclosure list (limit 0.1%)
None of the	e ingredients is listed.
· C	anadian Ingredient Disclosure list (limit 1%)
None of the	e 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.

Department issuing SDS:

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

· Contact:

Customer Support

Phone: +33 (0)1 47 95 62 77

Customer Support

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

· Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative





according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

1 Identification

- · Product identifier
 - · Trade name: R4 Positive Control (lyoph.), q.s. ad 4 mL
 - · Article number: 5194C
 - 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 92430 Marnes-la-Coquette Phone: +33 (0)1 47 95 60 00 Fax: +33 (0)1 47 41 91 33 e-mail: fds-msds.fr@bio-rad.com

Bio-Rad laboratories (Canada) Ltd. 2403 Guénette Montreal, Montréal (Québec) H4R 2E9 Phone: (800) 361-1808 Fax: (514) 334-0872

· Information department: Customer support. · Emergency telephone number: See item 16

2 Hazard identification

· Classification of the substance or mixture



Skin Sensitizer - Category 1 H317 May cause an allergic skin reaction.

Aquatic Acute 3 H402 Harmful to aquatic life.

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

- · 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.

Harmful to aquatic life.

Harmful to aquatic life with long lasting effects.

(Contd. on page 2)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 1)

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapours/spray.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

Wear protective gloves.

If on skin: Wash with plenty of soap and water.

Take off contaminated clothing and wash it before reuse.

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

Specific treatment (see on this label).

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

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] ≤0.1% w/w and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

- Acute Toxicity (Oral) Category 3, H301; Acute Toxicity (Dermal) Category 2, H310; Acute Toxicity (Inhalation) Category 2, H330
- Skin Corrosion Category 1C, H314; Serious Eye Damage Category 1, H318
- Aquatic Acute 1, H400; Aquatic Chronic 1, H410
- 🔥 Skin Sensitizer Category 1A, 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)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

Use fire fighting measures that suit the environment.

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

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

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Wear disposable gloves.

- Environmental precautions: Do not allow product to reach sewage system or any water course.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
 - · Precautions for safe handling

Prevent formation of dust.

Follow good laboratory practices.

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

8 Exposure controls/ Personal protection

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

(Contd. on page 4)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 3)

· 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.

· 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: Fluid

· Color: According to product specification

· Odor: Weak, characteristic

• pH-value at 20 °C: 7.4

· Change in condition

· Melting point/Melting range: Undetermined.

· Flash point: Not applicable.

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

· **Density:** Not determined.

· Solubility in / Miscibility with

· Water: Soluble.

• Other information No further relevant information available.

10 Stability and reactivity

- · **Reactivity** No further relevant information available.
 - · 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.

(Contd. on page 5)



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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 4)

· 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.

12 Ecological information

- · Toxicity
 - · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
 - · Bioaccumulative potential No further relevant information available.
 - · Mobility in soil No further relevant information available.
- · Additional ecological information:
 - · General notes:

Avoid transfer into the environment.

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

- Results of PBT and vPvB assessment
 - · **PBT:** Not applicable.
 - · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

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





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 5)

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

15 Regulatory information

· Safety, health and environmental regulations/legislation enecific for the substance or mixture

· S	Section 355 (extremely hazardous substances):
None of the	e ingredient is listed.
· S	Section 313 (Specific toxic chemical listings):
None of the	e ingredients is listed.
· TSC	A (Toxic Substances Control Act):
7647-14-5	sodium chloride
1310-73-2	sodium hydroxide
· Can	adian substance listings:
· C	Canadian Domestic Substances List (DSL)
7647-14-5	sodium chloride
1310-73-2	sodium hydroxide
· C	Canadian Ingredient Disclosure list (limit 0.1%)
None of the	e ingredients is listed.
· C	Canadian Ingredient Disclosure list (limit 1%)
None of the	e ingredients is listed.



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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 6)

· 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.

· Department issuing SDS:

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

· Contact:

Customer Support

Phone: +33 (0)1 47 95 62 77

Customer Support

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

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative





according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

1 Identification

- · Product identifier
 - · Trade name: R6 Sample Diluant (35 mL)
 - · Article number: 5145D
 - · 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 92430 Marnes-la-Coquette Phone: +33 (0)1 47 95 60 00 Fax: +33 (0)1 47 41 91 33 e-mail: fds-msds.fr@bio-rad.com

Bio-Rad laboratories (Canada) Ltd. 2403 Guénette Montreal, Montréal (Québec) H4R 2E9

Phone: (800) 361-1808 Fax: (514) 334-0872

· Information department: Customer support. · Emergency telephone number: See item 16

2 Hazard identification

· Classification of the substance or mixture



Skin Sensitizer - Category 1 H317 May cause an allergic skin reaction.

Aquatic Acute 3 H402 Harmful to aquatic life.

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

- · 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.

Harmful to aquatic life.

Harmful to aquatic life with long lasting effects.

(Contd. on page 2)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R6 - Sample Diluant (35 mL)

(Contd. of page 1)

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapours/spray.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

Wear protective gloves.

If on skin: Wash with plenty of soap and water.

Take off contaminated clothing and wash it before reuse.

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

Specific treatment (see on this label).

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

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] ≤0.1% w/w and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

- Acute Toxicity (Oral) Category 3, H301; Acute Toxicity (Dermal) Category 2, H310; Acute Toxicity (Inhalation) Category 2, H330
- Skin Corrosion Category 1C, H314; Serious Eye Damage Category 1, H318
- Aquatic Acute 1, H400; Aquatic Chronic 1, H410
- 🔥 Skin Sensitizer Category 1A, H317

4 First-aid measures

- Description of first aid measures
 - · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Immediately call a doctor.
- · Information for doctor:
 - · Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)



Page 3/7

Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R6 - Sample Diluant (35 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.

- · 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 to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

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

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
 - · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Follow good laboratory practices.

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

CDN

(Contd. on page 4)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R6 - Sample Diluant (35 mL)

(Contd. of page 3)

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.
- · 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.

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

· Protection of hands:

Protective gloves

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

· Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

 Information on basic 	physical	and chemical	properties
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· General Information

· Appearance:

· **Form:** Fluid

· Color: Dark orange color · Odor: Weak, characteristic

· Change in condition

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

· Flash point: Not applicable.

Auto igniting: Product is not selfigniting.

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

· **Density:** Not determined.

· Solubility in / Miscibility with

· Water: Fully miscible.

• Other information No further relevant information available.



Page 5/7

Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R6 - Sample Diluant (35 mL)

(Contd. of page 4)

10 Stability and reactivity

- · Reactivity No further relevant information available.
 - · Chemical stability
 - Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:
 - · Primary irritant effect:
 - · on the skin: No irritant effect.
 - on the eye: No irritating effect.
 - · Sensitization: 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.

12 Ecological information

- · Toxicity
 - · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
 - · Bioaccumulative potential No further relevant information available.
 - · Mobility in soil No further relevant information available.
- Additional ecological information:
 - · General notes:

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

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

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

(Contd. on page 6)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R6 - Sample Diluant (35 mL)

(Contd. of page 5)

- · **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
 - · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

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

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.

(Contd. on page 7)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R6 - Sample Diluant (35 mL)

(Contd. of page 6)

· TSCA (Toxic Substances Control Act):

7647-14-5 sodium chloride

1310-73-2 sodium hydroxide

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

Canadian Ingredient Disclosure list (limit 1%)

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.

Department issuing SDS:

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

· Contact:

Customer Support

Phone: +33 (0)1 47 95 62 77

Customer Support

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

Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxić vPvB: very Persistent and very Bioaccumulative





according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

1 Identification

- · Product identifier
 - · Trade name: R7 Conjugate (10x conc.), 2.8 mL
 - · Article number: 5194E
 - · 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 92430 Marnes-la-Coquette Phone: +33 (0)1 47 95 60 00 Fax: +33 (0)1 47 41 91 33 e-mail: fds-msds.fr@bio-rad.com

Bio-Rad laboratories (Canada) Ltd. 2403 Guénette Montreal, Montréal (Québec) H4R 2E9 Phone: (800) 361-1808

Phone: (800) 361-1808 Fax: (514) 334-0872

· Information department: Customer support. · Emergency telephone number: See item 16

2 Hazard identification

· Classification of the substance or mixture



Skin Sensitizer - Category 1 H317 May cause an allergic skin reaction.

Aquatic Acute 3 H402 Harmful to aquatic life.

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

- · 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.

Harmful to aquatic life.

Harmful to aquatic life with long lasting effects.

(Contd. on page 2)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 1)

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapours/spray.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

Wear protective gloves.

If on skin: Wash with plenty of soap and water.

Take off contaminated clothing and wash it before reuse.

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

Specific treatment (see on this label).

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

3 Composition/Information on ingredients

· Chemical characterization: Mixtures

· Description:

Mixture containing hazardous components.

Contains components of animal origin.

· Dangero	us components:	
56-81-5	glycerol	5-10% w/w *
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)	≤0.1% w/w
	 Acute Toxicity (Oral) - Category 3, H301; Acute Toxicity (Dermal) – Category 2, H310; Acute Toxicity (Inhalation) - Category 2, H330 Skin Corrosion - Category 1C, H314; Serious Eye Damage - Category 1, H318 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sensitizer - Category 1A, H317 	

^{*} Actual concentration ranges are withheld as a trade secret.

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.

(Contd. on page 3)



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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 2)

- · Information for doctor:
 - · Most important symptoms and effects, both acute and delayed No further relevant information available.
 - · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
 - · Suitable extinguishing agents:

Use fire fighting measures that suit the environment.

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

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

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Wear disposable gloves.

- · Environmental precautions: Do not allow product to reach sewage system or any water course.
- · Methods and material for containment and cleaning up:

Absorb liquid components with liquid-binding material.

Dispose contaminated material as waste according to item 13.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

7 Handling and storage

- · Handling:
 - · Precautions for safe handling Follow good laboratory practices.
 - Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
 - · Storage:
 - · Requirements to be met by storerooms and receptacles: No special requirements.
 - · Information about storage in one common storage facility: Not required.
 - Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

CDN

(Contd. on page 4)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 3)

8 Exposure controls/ Personal protection

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

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

56-81-5 glycerol

EL 10* 3** mg/m³

*mist; **mist, resirable

EV 10 mg/m³

- · Additional information: The lists that were valid during the creation were used as basis.
- · 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: Fluid · Color: Red

· Odor: Weak, characteristic

• **pH-value at 20 °C:** 7.1

· Change in condition

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

· Flash point: Not applicable.

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

· **Density:** Not determined.

· Solubility in / Miscibility with

• Water: Fully miscible.

Other information No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

(Contd. on page 5)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 4)

- · Chemical stability
 - · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:
 - · **Sensitization:** Sensitization possible through skin contact.
 - Additional toxicological information:

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

Irritant

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

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
 - · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
 - · Bioaccumulative potential No further relevant information available.
 - · Mobility in soil No further relevant information available.
- Additional ecological information:
 - · General notes:

Avoid transfer into the environment.

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

- · Results of PBT and vPvB assessment
 - · **PBT:** Not applicable.
 - · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

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according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 5)

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

15 Regulatory information

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

· Sara	
· S	ection 355 (extremely hazardous substances):
None of the	e ingredient is listed.
· S	ection 313 (Specific toxic chemical listings):
None of the	e ingredients is listed.
·TSC	A (Toxic Substances Control Act):
7647-14-5	sodium chloride
1310-73-2	sodium hydroxide

(Contd. on page 7)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 6)

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

National regulations:

	_
Class	Share in %
NK	10.0

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

16 Other information

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

Department issuing SDS:

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

Contact:

Customer Support

Phone: +33 (0)1 47 95 62 77

Customer Support

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

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative



Page 1/7

Safety Data Sheet according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

1 Identification

- · Product identifier
 - · Trade name: R8 Substrat Buffer (0.015% H2O2, 4% DMSO) (60 mL)
 - · Article number: 7435S
 - · 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 92430 Marnes-la-Coquette Phone: +33 (0)1 47 95 60 00 Fax: +33 (0)1 47 41 91 33 e-mail: fds-msds.fr@bio-rad.com

Bio-Rad laboratories (Canada) Ltd. 2403 Guénette Montreal. Montréal (Québec) H4R 2E9 Phone: (800) 361-1808

Fax: (514) 334-0872

· Information department: Customer support. · Emergency telephone number: See item 16

2 Hazard 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 = 0Fire = 0 Reactivity = 0

CDN

(Contd. on page 2)



according to HPR, Schedule 1

Page 2/7 Safety Data Sheet

Printing date 11/01/2020

Reviewed on 07/17/2015

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

(Contd. of page 1)

3 Composition/Information on ingredients

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

77-92-9 citric acid

Eye Irritation - Category 2A, H319

1-5% w/w *

* Actual concentration ranges are withheld as a trade secret.

4 First-aid measures

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

5 Fire-fighting measures

- · Extinguishing media
 - Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear disposable gloves.
- · Environmental precautions:

Dilute with plenty of water.

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

- Methods and material for containment and cleaning up:
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Reference to other sections No dangerous substances are released.

(Contd. on page 3)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R8 - Substrat Buffer (0.015% H2O2, 4% DMSO) (60 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.
- · Personal protective equipment:
 - · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- Breathing equipment: Suitable respiratory protective device recommended.
- · Protection of hands:

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

· Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

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

· Form: Fluid Colorless

· **Odor:** Weak, characteristic

- · Change in condition
 - Melting point/Melting range: Undetermined.
 Boiling point/Boiling range: Undetermined.

(Contd. on page 4)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

		(Contd. of page 3)
· Flash point:	Not applicable.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Density:	Not determined.	
· Solubility in / Miscibility	with	
· Water:	Fully miscible.	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
 - · Chemical stability
 - · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:
 - · Primary irritant effect:
 - · on the skin: No irritant effect.
 - · on the eye: No irritating effect.
 - · Sensitization: No sensitizing effects known.
 - · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

7722-84-1 hydrogen peroxide solution

3

NTP (National Toxicology Program)

None of the ingredients is listed.

- CDN

(Contd. on page 5)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 4)

12 Ecological information

- · Toxicity
 - · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
 - · Bioaccumulative potential No further relevant information available.
 - · Mobility in soil No further relevant information available.
- Additional ecological information:
 - · General notes:

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

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

- Results of PBT and vPvB assessment
 - · **PBT**: Not applicable.
 - · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
 - · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

UN-Number		
· ADR, IATA	Void	
<u> </u>	VOIG	
UN proper shipping name		
· ADR, IATA	Void	
Transport hazard class(es)		
· ADR, IATA		
Class	Void	
Packing group		
· ADR, IATA	Void	
Environmental hazards:		
· Marine pollutant:	No	

(Contd. on page 6)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 5)

· Special precautions for user Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

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

15 Regulatory information

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

· Section 355 (extremely hazardous substances):

7722-84-1 hydrogen peroxide solution

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

67-68-5 dimethyl sulfoxide 77-92-9 citric acid

127-09-3 Sodium Acetate

60-00-4 edetic acid

7722-84-1 hydrogen peroxide solution

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

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

67-68-5 dimethyl sulfoxide

77-92-9 citric acid

· National regulations:

Class	Share in %
NK	3.9

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

16 Other information

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

(Contd. on page 7)



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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 6)

· Department issuing SDS:

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

Contact:

Customer Support

Phone: +33 (0)1 47 95 62 77

Customer Support

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

Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative



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Safety Data Sheet according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

1 Identification

- · Product identifier
 - · Trade name: R9 Chromogen (TMB) (5 mL)
 - · Article number: 7436J
 - · 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 92430 Marnes-la-Coquette Phone: +33 (0)1 47 95 60 00 Fax: +33 (0)1 47 41 91 33

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

Bio-Rad laboratories (Canada) Ltd. 2403 Guénette Montreal, Montréal (Québec) H4R 2E9 Phone: (800) 361-1808

Phone: (800) 361-1808 Fax: (514) 334-0872

· Information department: Customer support. · Emergency telephone number: See item 16

2 Hazard 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 = 0Fire = 0Reactivity = 0



Page 2/7

Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 1)

3 Composition/Information on ingredients

· Chemical characterization: Mixtures

Description: Mixture containing components at a non hazardous concentration.

· Dangerous components: Void

4 First-aid measures

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

5 Fire-fighting measures

- · Extinguishing media
 - Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear disposable gloves.
- · Environmental precautions:

Dilute with plenty of water.

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

- Methods and material for containment and cleaning up:
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- · Reference to other sections No dangerous substances are released.

CDN -

(Contd. on page 3)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

Trade name: R9 - Chromogen (TMB) (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.
- · Personal protective equipment:
 - · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- Breathing equipment: Suitable respiratory protective device recommended.
- · Protection of hands:

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

· Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

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

Form: Fluid
 Color: Colorless
 Odor: Odorless

- · Change in condition
 - Melting point/Melting range: Undetermined.
 Boiling point/Boiling range: Undetermined.

(Contd. on page 4)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

		(Contd. of page 3
· Flash point:	Not applicable.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Density:	Not determined.	
· Solubility in / Miscibilit	y with	
· Water:	Fully miscible.	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
 - · Chemical stability
 - Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:
 - · Primary irritant effect:
 - on the skin: No irritant effect.
 - · on the eye: No irritating effect.
 - · Sensitization: No sensitizing effects known.
 - · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 4)

12 Ecological information

- · Toxicity
 - · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
 - · Bioaccumulative potential No further relevant information available.
 - · Mobility in soil No further relevant information available.
- Additional ecological information:
 - **General notes:**

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

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

- Results of PBT and vPvB assessment
 - · **PBT**: Not applicable.
 - · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
 - Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

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





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 5
Not applicable.
t II of Not applicable.
Not dangerous according to the above specifications.
Void

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):

54827-17-7 3,3',5,5'-tetramethylbenzidine

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

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

54827-17-7 3,3',5,5'-tetramethylbenzidine

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

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

· National regulations:

Class	Share in %
	0.2

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

16 Other information

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

Department issuing SDS:

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 6)

· Contact:

Customer Support

Phone: +33 (0)1 47 95 62 77

Customer Support

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

Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative





according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

1 Identification

- · Product identifier
 - · Trade name: R10 Stop Solution (1N H₂SO₄), 28 mL
 - · Article number: 7438L
 - · 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 92430 Marnes-la-Coquette Phone: +33 (0)1 47 95 60 00 Fax: +33 (0)1 47 41 91 33 e-mail: fds-msds.fr@bio-rad.com

Bio-Rad laboratories (Canada) Ltd. 2403 Guénette Montreal, Montréal (Québec) H4R 2E9 Phone: (800) 361-1808

Phone: (800) 361-1808 Fax: (514) 334-0872

· Information department: Customer support. · Emergency telephone number: See item 16

2 Hazard identification

· Classification of the substance or mixture



Health hazard

Carcinogenicity - Category 1A H350 May cause cancer.



Corrosion

Skin Corrosion - Category 1A H314 Causes severe skin burns and eye damage.

Serious Eye Damage - Category 1 H318 Causes serious eye damage.

- · Label elements
 - · GHS label elements

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

- · Hazard pictograms GHS05, GHS08
- · Signal word Danger
- Hazard-determining components of labeling:

sulphuric acid

Hazard statements

Causes severe skin burns and eye damage.

May cause cancer.

(Contd. on page 2)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 1)

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

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

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Store locked up.

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

· Classification system:

· NFPA ratings (scale 0 - 4)

Health = 3

Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)

Health = *3

Fire = 0

Reactivity = 0

3 Composition/Information on ingredients

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

7664-93-9 sulphuric acid

Carcinogenicity - Category 1A, H350

1-5% w/w *

Corrosive to Metals - Category 1, H290; Skin Corrosion - Category 1A, H314

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.

(Contd. on page 3)

^{*} Actual concentration ranges are withheld as a trade secret.



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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 2)

- · After swallowing: Consult a doctor, if necessary.
- · Information for doctor:
 - · Most important symptoms and effects, both acute and delayed No further relevant information available.
 - · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
 - Suitable extinguishing agents:

Use fire fighting measures that suit the environment.

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear disposable gloves.
- · Environmental precautions: Dilute with plenty of water.
- · Methods and material for containment and cleaning up:

Absorb liquid components with liquid-binding material.

Use neutralizing agent.

· Reference to other sections No dangerous substances are released.

7 Handling and storage

- · Handling:
 - Precautions for safe handling Follow good laboratory practices.
 - · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
 - · Storage:
 - · Requirements to be met by storerooms and receptacles: No special requirements.
 - Information about storage in one common storage facility: Not required.
 - Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

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

(Contd. on page 4)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 3)

· Control parameters

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

7664-93-9 sulphuric acid

EL () 0.2 mg/m³

ACGIH A2; IARC 1

- · Additional information: The lists that were valid during the creation were used as basis.
- · 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: Goggles recommended during refilling.

9 Physical and chemical properties

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

· Form: Fluid · Color: Colorless

· Odor: Weak, characteristic

• pH-value at 20 °C: < 2

· Change in condition

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

· Flash point: Not applicable.

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

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

· **Density:** Not determined.

· Solubility in / Miscibility with

• Water: Fully miscible.

• Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
 - Chemical stability
 - Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· Possibility of hazardous reactions No dangerous reactions known.

(Contd. on page 5)





according to HPR, Schedule 1

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

(Contd. of page 4)

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
 - · Additional toxicological information:

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

Corrosive

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

7664-93-9 sulphuric acid

1

NTP (National Toxicology Program)

7664-93-9 sulphuric acid

K

12 Ecological information

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

13 Disposal considerations

- · Waste treatment methods
 - · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

(Contd. on page 6)





Safety Data Sheet according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 5)

· Recommended cleansing agent: Water, if necessary with cleansing agents.

SULPHURIC ACID HURIC ACID orrosive substances
HURIC ACID
orrosive substances
orrosive substances
orrosive substances
orrosive substances
C1) Corrosive substances
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(Contd. on page 7)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

(Contd. of page 6)

UN "Model Regulation":

UN2796, SULPHURIC ACID, 8, II

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture Sara
 - Section 355 (extremely hazardous substances):

7664-93-9 sulphuric acid

Section 313 (Specific toxic chemical listings):

7664-93-9 sulphuric acid

TSCA (Toxic Substances Control Act):

7664-93-9 sulphuric acid

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

- · Canadian substance listings:
 - · Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

7664-93-9 sulphuric acid

- · National regulations:
 - · Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· 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.

Department issuing SDS:

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

· Contact:

Customer Support

Phone: +33 (0)1 47 95 62 77

Customer Support

Phone: +33 (0)1 47 95 61 85 • **Abbreviations and acronyms:**

ICAO: International Civil Aviation Organisation

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/17/2015

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

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