

KIT COMPONENTS

Product name: **DISCRIMINATORY KIT**

Product code: **3551177**

Article number	Description	Quantity	Symbols
5177A	A1 - Denaturing solution, 8 ml	1	
5177B	A2 - Deanturing solution additive, 0.4 ml	1	
5177C	B - Clarifying solution, 6 ml	1	GHS02 GHS07 GHS05
5177D	PK - Proteinase K, 0.2 ml	1	GHS08 GHS07
5177E	BI - Blocking solution (10x), 10 ml	1	GHS07
5177F	Ab Ctrl - Control Ab (10x), 8 ml	1	GHS07
5177G	Ab Test - Test Ab (10x), 4 ml	1	GHS07
5177H	Ab II - Conjugate (10x), 14 ml	1	GHS07



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Safety Data Sheet according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/08/2015

1 Identification

- · Product identifier
 - · Trade name: A1 Denaturing solution, 8 ml
 - · Article number: 5177A
 - · 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 = 0

Reactivity = 0

CDN

(Contd. on page 2)





according to HPR, Schedule 1

Reviewed on 07/08/2015 Printing date 11/01/2020

Trade name: A1 - Denaturing solution, 8 ml

(Contd. of page 1)

3 Composition/Information on ingredients

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

151-21-3 sodium dodecyl sulphate

5-10% w/w *

Acute Toxicity (Dermal) – Category 3, H311

Output

Description - Category 4, H302; Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319

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: Absorb liquid components with liquid-binding material.
- · Reference to other sections No dangerous substances are released.

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





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: A1 - Denaturing solution, 8 ml

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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: Fluid Colorless

· **Odor:** Weak, characteristic

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

· Flash point: Not applicable.

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

(Contd. on page 4)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: A1 - Denaturing solution, 8 ml

(Contd. of page 3)

· **Density:** Not determined.

· Solubility in / Miscibility with

· Water: Fully miscible.

• Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity 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 07/08/2015

Trade name: A1 - Denaturing solution, 8 ml

(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.

UN-Number	
· DOT/TDG, ADR, ADN, IMDG, IATA	Void
UN proper shipping name	
· DOT/TDG, ADN, IMDG, IATA	Void
· ADR	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.
Fransport in bulk according to Annex II	of
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Void

- CDN -

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according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: A1 - Denaturing solution, 8 ml

(Contd. of page 5)

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):

137-16-6 Sarkosyl

151-21-3 sodium dodecyl sulphate

57-13-6 urea

7647-14-5 sodium chloride

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%)

151-21-3 sodium dodecyl sulphate

· 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

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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)

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Trade name: A1 - Denaturing solution, 8 ml

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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 07/08/2015

1 Identification

- · Product identifier
 - · Trade name: A2 Deanturing solution additive, 0.4 ml
 - · Article number: 5177B
 - · 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



according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: A2 - Deanturing solution additive, 0.4 ml

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3 Composition/Information on ingredients

· Chemical characterization: Mixtures

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

· Dangerous components: Void

4 First-aid measures

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

5 Fire-fighting measures

- · Extinguishing media
 - Suitable extinguishing agents:

Use fire fighting measures that suit the environment.

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

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear disposable gloves.
- Environmental precautions: Do not allow product to reach sewage system or any water course.
- Methods and material for containment and cleaning up:
- Absorb liquid components with liquid-binding material.
- · Reference to other sections No dangerous substances are released.

7 Handling and storage

- · Handling:
 - · Precautions for safe handling

Avoid all contact with reagents, even those considered to be non-hazardous.

(Contd. on page 3)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: A2 - Deanturing solution additive, 0.4 ml

(Contd. of page 2)

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: Fluid
· Color: Colorless
· Odor: Odorless

- · 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.

(Contd. on page 4)





according to HPR, Schedule 1

Printing date 11/01/2020

Trade name: A2 - Deanturing solution additive, 0.4 ml

(Contd. of page 3)

Reviewed on 07/08/2015

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

(Contd. on page 5)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: A2 - Deanturing solution additive, 0.4 ml

· Other adverse effects No further relevant information available.

(Contd. of page 4)

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, ADN, IMDG, IATA · ADR	Void 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

· Sara
· Section 355 (extremely hazardous substances):

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

None of the ingredient is listed.

(Contd. on page 6)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: A2 - Deanturing solution additive, 0.4 ml

(Contd. of page 5)

· TSCA (Toxic Substances Control Act):

77-92-9 citric acid

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

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

77-92-9 citric acid

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.

· 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

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· 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 07/08/2015

1 Identification

- · Product identifier
 - · Trade name: B Clarifying solution, 6 ml
 - · Article number: 5177C
 - · 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



Flame

Flammable Liquids - Category 3 H226 Flammable liquid and vapour.



Corrosion

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



Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

Skin Irritation - Category 2 H315 Causes skin irritation.

Specific Target Organ Toxicity - Single Exposure - H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

· Label elements

· GHS label elements

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

· Hazard pictograms GHS02, GHS05, GHS07

(Contd. on page 2)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: B - Clarifying solution, 6 ml

(Contd. of page 1)

· Signal word Danger

· Hazard-determining components of labeling:

butan-1-ol

· Hazard statements

Flammable liquid and vapour.

Harmful if swallowed.

Causes skin irritation.

Causes serious eye damage.

May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary statements

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment.

Use explosion-proof [electrical/ventilating/lighting] equipment.

Use non-sparking tools.

Take actions to prevent static discharges.

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

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

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

If swallowed: Call a poison center/doctor if you feel unwell.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

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.

Rinse mouth.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

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 = 3

Reactivity = 0

· HMIS-ratings (scale 0 - 4)

Health = *3

Fire = 3

Reactivity = 0



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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: B - Clarifying solution, 6 ml

(Contd. of page 2)

80-100% w/w *

3 Composition/Information on ingredients

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

71-36-3 butan-1-ol

- ♠ Flammable Liquids Category 3, H226
- Serious Eye Damage Category 1, H318
- Acute Toxicity (Oral) Category 4, H302; Skin Irritation Category 2, H315; Specific Target Organ Toxicity Single Exposure Category 3, H335-H336

4 First-aid measures

- · Description of first aid measures
 - · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· 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. Then consult a doctor.

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

5 Fire-fighting measures

- · Extinguishing media
 - · Suitable extinguishing agents:

Use fire fighting measures that suit the environment.

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

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

CDN

(Contd. on page 4)

^{*} 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 07/08/2015

Trade name: B - Clarifying solution, 6 ml

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6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- 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.

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:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- 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: Keep receptacle tightly sealed.
- · 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:

71-36-3 butan-1-ol

EL Short-term value: C 30 ppm

Long-term value: 15 ppm

EV 20 ppm

- 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.

(Contd. on page 5)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: B - Clarifying solution, 6 ml

(Contd. of page 4)

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

- · 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: Solution
Color: Yellow
Odor: Like alcohol

• **pH-value at 20 °C:** 6.1±0.1

· Change in condition

· Melting point/Melting range: Undetermined.

· Boiling point/Boiling range: 116 °C

· Flash point: 34 °C

· Ignition temperature: 340 °C

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

• **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor

mixtures are possible.

· Explosion limits:

• **Lower:** 1.5 Vol % • **Upper:** 9.4 Vol %

· Vapor pressure at 20 °C: 6.7 hPa

Density at 20 °C: 0.81 g/cm³

· 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 6)



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Safety Data Sheet according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: B - Clarifying solution, 6 ml

(Contd. of page 5)

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

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:

· LD/LC50 values that are relevant for classification:

71-36-3 butan-1-ol

Oral	LD50	790 mg/kg (rat)
Dermal	LD50	3400 mg/kg (rabbit)
Inhalative	LC50/4 h	8000 mg/l (rat)

- · Primary irritant effect:
 - · on the skin: Irritant to skin and mucous membranes.
 - · on the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

Harmful 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 7)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: B - Clarifying solution, 6 ml

(Contd. of page 6)

- · **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:

· Packing group

DOT/TDG, ADR, IMDG, IATA

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

UN-Number	
· DOT/TDG	UN1120
· ADR, IMDG, IATA	1120
UN proper shipping name	
· DOT/TDG, IMDG, IATA	BUTANOLS, solution
· ADR	1120 BUTANOLS, solution
Transport hazard class(es)	
· DOT/TDG (Transport dange	rous goods):
Communication of the Communica	
· Class	3 Flammable liquids
· Label	3
· ADR	
· Class	3 (F1) Flammable liquids
· Label	3
· IMDG, IATA	
· Class	3 Flammable liquids
· Label	3

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(Contd. on page 8)





according to HPR, Schedule 1

Reviewed on 07/08/2015 Printing date 11/01/2020

Trade name: B - Clarifying solution, 6 ml

(Contd. of page 7)

· Environmental hazards:

· Marine pollutant:

No

· Special precautions for user

Warning: Flammable liquids

Hazard identification number (Kemler code): 30

· EMS Number:

F-E,S-D

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

Not applicable.

UN "Model Regulation":

UN1120, BUTANOLS, solution, 3, III

15 Regulatory information

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

· Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

71-36-3 butan-1-ol

· TSCA (Toxic Substances Control Act):

71-36-3 butan-1-ol

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%)

All ingredients are listed.

· National regulations:

Class	Share in %
NK	99.9

· 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 9)



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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: B - Clarifying solution, 6 ml

(Contd. of page 8)

· 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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





according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/08/2015

1 Identification

- · Product identifier
 - · Trade name: PK Proteinase K, 0.2 ml
 - · Article number: 5177D
 - · 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



Health hazard

Respiratory Sensitizer - Category 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



Skin Irritation - Category 2 H315 Causes skin irritation.

Eye Irritation - Category 2A H319 Causes serious eye irritation.

Specific Target Organ Toxicity - Single Exposure - H335 May cause respiratory irritation.

Category 3

· Label elements

· GHS label elements

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

- · Hazard pictograms GHS07, GHS08
- · Signal word Danger
- · Hazard-determining components of labeling:

Proteinase, Tritirachium album serine

(Contd. on page 2)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: PK - Proteinase K, 0.2 ml

(Contd. of page 1)

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause respiratory irritation.

· Precautionary statements

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

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

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

[In case of inadequate ventilation] wear respiratory protection.

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

Specific treatment (see on this label).

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.

Call a poison center/doctor if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center/doctor.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

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

· Classification system:

NFPA ratings (scale 0 - 4)

Health = 2

Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)

Health = *2

Fire = 0

Reactivity = 0

3 Composition/Information on ingredients

· Chemical characterization: Mixtures

· **Description:** Mixture containing components at a non hazardous concentration.

Dangerous components: 39450-01-6 Proteinase, Tritirachium album serine Respiratory Sensitizer - Category 1, H334 Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H335 56-81-5 glycerol 1-5% w/w * (Contd. on page 3)



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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: PK - Proteinase K, 0.2 ml

(Contd. of page 2)

* 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: 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:

Dilute with plenty of water.

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 No dangerous substances are released.

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.

(Contd. on page 4)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: PK - Proteinase K, 0.2 ml

(Contd. of page 3)

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

8 Exposure controls/ Personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
 - · Components with limit values that require monitoring at the workplace:

56-81-5 glycerol

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:

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: Viscous · Color: Red

· **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.

(Contd. on page 5)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: PK - Proteinase K, 0.2 ml

(Contd. of page 4)

· Solubility in / Miscibility with

• Water: Fully miscible.

· Solvent content:

Organic solvents: 1.9 %

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.

(Contd. on page 6)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: PK - Proteinase K, 0.2 ml

(Contd. of page 5)

· 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 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.

JN-Number	M. C.
· DOT/TDG, ADR, ADN, IMDG, IATA	Void
JN proper shipping name	
· DOT/TDG, ADN, IMDG, IATA	Void
· ADR	Void
Fransport 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.
Fransport in bulk according to Annex II	of
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Void

CDN

(Contd. on page 7)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: PK - Proteinase K, 0.2 ml

(Contd. of page 6)

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):

56-81-5	glycero
---------	---------

34487-61-1 sodium hydrogen 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bisphenolate S,S-dioxide

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

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

56-81-5	glycero
---------	---------

34487-61-1 sodium hydrogen 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bisphenolate S,S-dioxide

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 %
NK	1.9

· 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.

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

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Safety Data Sheet according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: PK - Proteinase K, 0.2 ml

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

(Contd. of page 7)





according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/08/2015

1 Identification

- · Product identifier
 - · Trade name: BI Blocking solution (10x), 10 ml
 - · Article number: 5177E
 - · 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 07/08/2015

Trade name: BI - Blocking solution (10x), 10 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:		
56-81-5	glycerol	10-30% 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 o	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 07/08/2015

Trade name: BI - Blocking solution (10x), 10 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.

See Section 13 for disposal information.

7 Handling and storage

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





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: BI - Blocking solution (10x), 10 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: FluidColor: YellowishOdor: Product specific

· 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.

Solvent content:

· Organic solvents: 30.0 %

• 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 07/08/2015

Trade name: BI - Blocking solution (10x), 10 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
 - · 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.
 - · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

DN -





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: BI - Blocking solution (10x), 10 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.

Transport information		
UN-Number		
· DOT/TDG, ADR, ADN, IMDG, IATA	Void	
UN proper shipping name		
· DOT/TDG, ADN, IMDG, IATA	Void	
· ADR	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	of	
MARPOL73/78 and the IBC Code	Not applicable.	
UN "Model Regulation":	Void	

15 Regulatory information

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

a
Section 355 (extremely hazardous substances):
e ingredient is listed.
Section 313 (Specific toxic chemical listings):
e ingredients is listed.
CA (Toxic Substances Control Act):
glycerol
sodium chloride
potassium dihydrogenorthophosphate

(Contd. on page 7)





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: BI - Blocking solution (10x), 10 ml

	(Contd. of page 6)
1310-73-2	sodium hydroxide
7732-18-5	water, distilled, conductivity or of similar purity
· Can	adian substance listings:
. (Canadian Domestic Substances List (DSL)
56-81-5	glycerol
7647-14-5	sodium chloride
7778-77-0	potassium dihydrogenorthophosphate
1310-73-2	sodium hydroxide
7732-18-5	water, distilled, conductivity or of similar purity
. (Canadian Ingredient Disclosure list (limit 0.1%)
None of th	e ingredients is listed.
. (Canadian Ingredient Disclosure list (limit 1%)
None of th	e ingredients is listed.

· National regulations:

Class	Share in %
NK	30.0

· 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:

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 07/08/2015

1 Identification

- · Product identifier
 - · Trade name: Ab Ctrl Control Ab (10x), 8 ml
 - · Article number: 5177F
 - · 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 07/08/2015

Trade name: Ab Ctrl - Control Ab (10x), 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.

· Dangero	us components:	
56-81-5	glycerol	10-30% 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 of	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 07/08/2015

Trade name: Ab Ctrl - Control Ab (10x), 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.

See Section 13 for disposal information.

7 Handling and storage

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





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: Ab Ctrl - Control Ab (10x), 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: FluidColor: YellowishOdor: Product specific

· 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.

· Solvent content:

· Organic solvents: 30.0 %

• 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 07/08/2015

Trade name: Ab Ctrl - Control Ab (10x), 8 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
 - · 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.
 - · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

DN -





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: Ab Ctrl - Control Ab (10x), 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.

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15 Regulatory information

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

Gui	u .
. 5	Section 355 (extremely hazardous substances):
None of th	ne ingredient is listed.
. \$	Section 313 (Specific toxic chemical listings):
None of th	ne ingredients is listed.
· TSC	CA (Toxic Substances Control Act):
56-81-5	glycerol
7647-14-5	sodium chloride
7778-77-0	potassium dihydrogenorthophosphate
	(Contd. on page 7)

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according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: Ab Ctrl - Control Ab (10x), 8 ml

	(Contd. of page 6)
1310-73-2	sodium hydroxide
7732-18-5	water, distilled, conductivity or of similar purity
_	

· Canadian substance listings:

Canadian Domestic Substances List (DSL)
glycerol
sodium chloride
potassium dihydrogenorthophosphate
sodium hydroxide
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 %
NK	30.0

· 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:

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 07/08/2015

1 Identification

- · Product identifier
 - · Trade name: Ab Test Test Ab (10x), 4 ml
 - · Article number: 5177G
 - · 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 07/08/2015

Trade name: Ab Test - Test Ab (10x), 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.

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] ≤0.1% v 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	· Dangero	us components:	
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	56-81-5	glycerol	10-30% w/w ³
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	55965-84-9		≤0.1% w/w
♦ Skin Sensitizer - Category 1A, H317		Category 2, H310; Acute Toxicity (Inhalation) - Category 2, H330 Skin Corrosion - Category 1C, H314; Serious Eye Damage - Category 1, H318	

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 07/08/2015

Trade name: Ab Test - Test Ab (10x), 4 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.

See Section 13 for disposal information.

7 Handling and storage

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



Page 4/7

Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: Ab Test - Test Ab (10x), 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:

56-81-5 glycerol

EL 10* 3** mg/m³

*mist; **mist, resirable

- · 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: FluidColor: YellowishOdor: Product specific

- · 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.

· Solvent content:

Organic solvents: 30.0 %

• Other information No further relevant information available.

CDN

(Contd. on page 5)



Page 5/7

Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: Ab Test - Test Ab (10x), 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
 - · 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.
 - · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

DN -





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: Ab Test - Test Ab (10x), 4 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.

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	None of the ingredient is listed.		
· S	ection 313 (Specific toxic chemical listings):		
None of the	None of the ingredients is listed.		
·TSC	TSCA (Toxic Substances Control Act):		
56-81-5	glycerol		
7647-14-5	sodium chloride		
7778-77-0	potassium dihydrogenorthophosphate		
1310-73-2	sodium hydroxide		
	(Contd. on page 7)		

- CDN





according to HPR, Schedule 1

Printing date 11/01/2020 Reviewed on 07/08/2015

Trade name: Ab Test - Test Ab (10x), 4 ml

		(Contd. of page 6)
7732-18-5 water, distilled, conductivity	or of similar purity	

· Canadian substance listings:

Canadian Substance nstrings.		
· Canadian Domestic Substances List (DSL)		
56-81-5	glycerol	
7647-14-5	sodium chloride	
7778-77-0	potassium dihydrogenorthophosphate	
1310-73-2	sodium hydroxide	
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 %
NK	30.0

· 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:

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 07/08/2015

1 Identification

- · Product identifier
 - · Trade name: Ab II Conjugate (10x), 14 ml
 - · Article number: 5177H
 - · 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.

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 07/08/2015

Trade name: Ab II - Conjugate (10x), 14 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
- Name of the 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.

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· 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.

See Section 13 for disposal information.

7 Handling and storage

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

8 Exposure controls/ Personal protection

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

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· 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: FluidColor: YellowishOdor: Product specific

· 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.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.

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· 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:

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.
 - · 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.

CDN

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UN-Number		
· DOT/TDG, ADR, ADN, IMDG, IATA	Void	
UN proper shipping name		
· DOT/TDG, ADN, IMDG, IATA	Void	
· ADR	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	of	
MARPOL73/78 and the IBC Code	Not applicable.	

15 Regulatory information

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

· Se	· Section 355 (extremely hazardous substances):	
None of the	None of the ingredient is listed.	
· Se	· Section 313 (Specific toxic chemical listings):	
None of the	None of the ingredients is listed.	
· TSCA	· TSCA (Toxic Substances Control Act):	
26172-54-3	2-Methyl-2h-isothiazolonhydrochlorid	
	Bronidox	
7732-18-5	water, distilled, conductivity or of similar purity	

Canadian substance listings:

· · · · · · · · · · · · · · · · · · ·	
· Canadian Domestic Substances List (DSL)	
26172-54-3	2-Methyl-2h-isothiazolonhydrochlorid
	Bronidox
7732-18-5	water, distilled, conductivity or of similar purity
Canadian Ingredient Disclosure list (limit 0.1%)	
None of the ingredients is listed.	

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· 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 Toxic vPvB: very Persistent and very Bioaccumulative