

**KIT COMPONENTS**Product name: **DISCRIMINATORY KIT**Product code: **3551177**

<b>Article number</b>	<b>Description</b>	<b>Quantity</b>	<b>Symbols</b>
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

**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

**1 Identification****· Product identifier**

- **Trade name: A1 - Denaturing solution, 8 ml**
  - **Article number: 5177A**
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
  - **Application of the substance / the mixture** Laboratory reagent or component.

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

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

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

See item 16

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

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

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

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

or ACCIDENT with this product.

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

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

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

The product is not classified according to the Globally Harmonized System (GHS).

**· Label elements**

- **GHS label elements** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void

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

Health = 0

Fire = 0

Reactivity = 0

**· HMIS-ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

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

- **PBT:** Not applicable.

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**Trade name: A1 - Denaturing solution, 8 ml**

· **vPvB:** Not applicable.



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**3 Composition/information on ingredients**

· **Chemical characterization: Mixtures**

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

· **Dangerous components:**

151-21-3	sodium dodecyl sulphate	2.5-10%
	 Acute Tox. 3, H311  Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	
57-13-6	urea	2.5-10%

**4 First-aid measures**

· **Description of first aid measures**

- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** 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.  
CO<sub>2</sub>, 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.

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**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:**

**57-13-6 urea**

WEEL () | 10 mg/m<sup>3</sup>

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

- **Exposure controls**
  - **Personal protective equipment:**
    - **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.
    - **Breathing equipment:** Suitable respiratory protective device recommended.
    - **Protection of hands:** Protective gloves
    - **Eye protection:** Safety glasses

**9 Physical and chemical properties**

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

· **General Information**

· **Appearance:**

- **Form:** Fluid
- **Color:** 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.

· **Density:** Not determined.

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**Trade name: A1 - Denaturing solution, 8 ml**

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- **Solubility in / Miscibility with**
  - **Water:** Fully miscible.
- **Other information** No further relevant information available.

**10 Stability and reactivity**

- **Reactivity**
  - **Chemical stability**
    - **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

- **Information on toxicological effects**
  - **Additional toxicological information:**  
The product is not subject to classification according to internally approved calculation methods for preparations:  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

**12 Ecological information**

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

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**Safety Data Sheet**  
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**Trade name: A1 - Denaturing solution, 8 ml**

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· **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

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

**14 Transport information**

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

**15 Regulatory information**

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

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

None of the ingredient is listed.

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

None of the ingredients is listed.

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

All ingredients are listed.

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**Trade name: A1 - Denaturing solution, 8 ml**

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

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

USA - Clinical Diagnostic Group

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**· Department issuing SDS:**

SDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

**· Contact:**

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USA

Bio-Rad Laboratories

6565 185th Avenue NE

Redmond, WA 98052-5039

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

**· Date of preparation / last revision** 08/10/2015 / 1**· Abbreviations and acronyms:**

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

ICAO: International Civil Aviation Organisation

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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**Trade name: A1 - Denaturing solution, 8 ml**

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ACGIH: American Conference of Governmental Industrial Hygienists  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
Acute Tox. 4: Acute toxicity, Hazard Category 4  
Acute Tox. 3: Acute toxicity, Hazard Category 3  
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

USA



**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

**1 Identification**· **Product identifier**

- **Trade name: A2 - Deanturing solution additive, 0.4 ml**
  - **Article number:** 5177B
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
  - **Application of the substance / the mixture** Laboratory reagent or component.

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

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

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

See item 16

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

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

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

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

or ACCIDENT with this product.

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

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

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

The product is not classified according to the Globally Harmonized System (GHS).

· **Label elements**

- **GHS label elements** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void

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

Health = 0

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

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

- **PBT:** Not applicable.

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USA

**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

**Trade name: A2 - Deanturing solution additive, 0.4 ml**· **vPvB:** Not applicable.

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**3 Composition/information on ingredients**

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

**4 First-aid measures**

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

**5 Fire-fighting measures**

- **Extinguishing media**
  - **Suitable extinguishing agents:**  
Use fire fighting measures that suit the environment.  
CO<sub>2</sub>, 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.  
Follow good laboratory practices.

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**Safety Data Sheet**  
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Printing date 08/10/2015

Reviewed on 07/08/2015

**Trade name: A2 - Deanturing solution additive, 0.4 ml**

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

**8 Exposure controls/personal protection**

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

**9 Physical and chemical properties**

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - **Form:** Fluid
      - **Color:** 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.
  - **Other information** No further relevant information available.

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Printing date 08/10/2015

Reviewed on 07/08/2015

**Trade name: A2 - Deanturing solution additive, 0.4 ml**

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**10 Stability and reactivity**

- **Reactivity**
  - **Chemical stability**
    - **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
  - **Possibility of hazardous reactions** No dangerous reactions known.
  - **Conditions to avoid** No further relevant information available.
  - **Incompatible materials:** No further relevant information available.
  - **Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

- **Information on toxicological effects**
  - **Additional toxicological information:**  
The product is not subject to classification according to internally approved calculation methods for preparations:  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

**12 Ecological information**

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

**13 Disposal considerations**

- **Waste treatment methods**
  - **Recommendation:** Must be specially treated adhering to official regulations.

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Reviewed on 07/08/2015

**Trade name: A2 - Deanturing solution additive, 0.4 ml**

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

**14 Transport information**

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

**15 Regulatory information**

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

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

None of the ingredient is listed.

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

None of the ingredients is listed.

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

77-92-9 citric acid

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

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

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

None of the ingredients is listed.

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**Trade name: A2 - Deanturing solution additive, 0.4 ml**

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

None of the ingredients is listed.

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

None of the ingredients is listed.

**· Cancerogenity categories**

**· EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

### 16 Other information

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

USA - Clinical Diagnostic Group

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**· Department issuing SDS:**

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Marnes-la-Coquette, France

**· Contact:**

Customer Support

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

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Bio-Rad Laboratories

6565 185th Avenue NE

Redmond, WA 98052-5039

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

**· Date of preparation / last revision** 08/10/2015 / -

**· Abbreviations and acronyms:**

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

ICAO: International Civil Aviation Organisation

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

**1 Identification**· **Product identifier**

- **Trade name: B - Clarifying solution, 6 ml**
  - **Article number: 5177C**
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
  - **Application of the substance / the mixture** Laboratory reagent or component.

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

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

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

See item 16

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

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

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or ACCIDENT with this product.

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

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

GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 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

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- **Signal word** Danger
- **Hazard-determining components of labeling:**  
butan-1-ol
- **Hazard statements**  
Flammable liquid and vapor.  
Harmful if swallowed.  
Causes skin irritation.  
Causes serious eye damage.  
May cause respiratory irritation. May cause drowsiness or dizziness.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Use explosion-proof electrical/ventilating/lighting/equipment.  
Wash thoroughly after handling.  
Wear protective gloves / eye protection / face protection.  
Wear protective gloves.  
Wear eye protection / face protection.  
Ground/bond container and receiving equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a poison center/doctor.  
In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.  
If swallowed: Call a poison center/doctor if you feel unwell.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
If skin irritation occurs: Get medical advice/attention.  
Rinse mouth.  
Specific treatment (see on this label).  
Take off contaminated clothing and wash it before reuse.  
Store locked up.  
Store in a well-ventilated place. Keep container tightly closed.  
Store in a well-ventilated place. Keep cool.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
  - **NFPA ratings (scale 0 - 4)**  
Health = 2  
Fire = 3  
Reactivity = 0
  - **HMIS-ratings (scale 0 - 4)**  
Health = 2  
Fire = 3  
Reactivity = 0
- **Other hazards**
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.

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· **vPvB:** Not applicable.

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**3 Composition/information on ingredients**

· **Chemical characterization: Mixtures**

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

· **Dangerous components:**

71-36-3	butan-1-ol	50-100%
	<ul style="list-style-type: none"> <li> Flam. Liq. 3, H226</li> <li> Eye Dam. 1, H318</li> <li> Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335-H336</li> </ul>	

**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.

CO<sub>2</sub>, 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 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.

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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**

PEL ()	300 mg/m <sup>3</sup> , 100 ppm
REL ()	Short-term value: C 150 mg/m <sup>3</sup> , C 50 ppm Skin
TLV ()	61 mg/m <sup>3</sup> , 20 ppm

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

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.

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

· **Protection of hands:** Protective gloves

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 · **Eye protection:** Safety glasses

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### 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 (68 °F):** 6.1±0.1

 · **Change in condition**

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** 116 °C (241 °F)

 · **Flash point:** 34 °C (93 °F)

 · **Ignition temperature:** 340 °C (644 °F)

 · **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 (68 °F):** 6.7 hPa (5 mm Hg)

 · **Density at 20 °C (68 °F):** 0.81 g/cm<sup>3</sup> (6.759 lbs/gal)

 · **Solubility in / Miscibility with**

 · **Water:** Fully miscible.

 · **Solvent content:**

 · **VOC content:** 99.9 %

 · **Other information** No further relevant information available.

### 10 Stability and reactivity

 · **Reactivity**

 · **Chemical stability**

 · **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

 · **Possibility of hazardous reactions** No dangerous reactions known.

 · **Conditions to avoid** No further relevant information available.

 · **Incompatible materials:** No further relevant information available.

 · **Hazardous decomposition products:** No dangerous decomposition products known.

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**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.

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

None of the ingredients is listed.

**12 Ecological information**

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

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**13 Disposal considerations**

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

**14 Transport information**

- **UN-Number**
  - DOT UN1120
  - ADR, IMDG, IATA 1120
- **UN proper shipping name**
  - DOT, IMDG, IATA BUTANOLS, solution
  - ADR 1120 BUTANOLS, solution
- **Transport hazard class(es)**
  - DOT
    - 
    - Class 3 Flammable liquids
    - Label 3
  - ADR
    - 
    - Class 3 (F1) Flammable liquids
    - Label 3
  - IMDG, IATA
    - 
    - Class 3 Flammable liquids
    - Label 3
- **Packing group**
  - DOT, ADR, IMDG, IATA III
- **Environmental hazards:**
  - Marine pollutant: No
- **Special precautions for user** Warning: Flammable liquids
  - Danger code (Kemler): 30
  - EMS Number: F-E,S-D
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

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· **UN "Model Regulation":** UN1120, BUTANOLS, solution, 3, III

**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):**

71-36-3 butan-1-ol

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

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

· **Carcinogen categories**

· **EPA (Environmental Protection Agency)**

71-36-3 butan-1-ol

D

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

None of the ingredients is listed.

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

None of the ingredients is listed.

· **National regulations:**

Class	Share in %
NK	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.

USA - Clinical Diagnostic Group  
Bio-Rad Laboratories  
4000 Alfred Nobel Drive  
Hercules, California 94547  
Phone: +1(510) 724-7000

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**· Department issuing SDS:**

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

**· Contact:**

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

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

**· Date of preparation / last revision** 08/10/2015 / 1**· Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
ICAO: International Civil Aviation Organisation  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
VOC: Volatile Organic Compounds (USA, EU)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
Flam. Liq. 3: Flammable liquids, Hazard Category 3  
Acute Tox. 4: Acute toxicity, Hazard Category 4  
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1  
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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**1 Identification**· **Product identifier**

- 
- Trade name: PK - Proteinase K, 0.2 ml**

· **Article number:** 5177D

- 
- Relevant identified uses of the substance or mixture and uses advised against**
- 
- No further relevant information available.

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

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

- 
- Information department:**
- Customer support.

· **Emergency telephone number:**

See item 16

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

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

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

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

or ACCIDENT with this product.

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

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

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

GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

· **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

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**· 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/vapors/spray
- Wear respiratory protection.
- Wash thoroughly after handling.
- Wear protective gloves.
- Wear eye protection / face protection.
- Use only outdoors or in a well-ventilated area.
- If on skin: Wash with plenty of soap and water.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- If experiencing respiratory symptoms: Call a poison center/doctor.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a poison center/doctor if you feel unwell.
- If skin irritation occurs: Get medical advice/attention.
- Specific treatment (see on this label).
- Take off contaminated clothing and wash it before reuse.
- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

**· Classification system:**

**· NFPA ratings (scale 0 - 4)**

- Health = 1
- Fire = 0
- Reactivity = 0

**· HMIS-ratings (scale 0 - 4)**

- Health = \*1
- Fire = 0
- Reactivity = 0

**· Other hazards**

**· Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**3 Composition/information on ingredients**

**· Chemical characterization: Mixtures**

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

**· Dangerous components:**

39450-01-6	Proteinase, Tritirachium album serine	50-100%
	Resp. Sens. 1, H334 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	

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**Trade name: PK - Proteinase K, 0.2 ml**

56-81-5	glycerol	(Contd. of page 2)
		0.1-2.5%

**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.  
CO<sub>2</sub>, 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.
  - **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.

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

**8 Exposure controls/personal protection**

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

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

**56-81-5 glycerol**

PEL ()	15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV ()	10* ppm *Mist

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

- **Exposure controls**
  - **Personal protective equipment:**
    - **General protective and hygienic measures:**  
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.

- **Solubility in / Miscibility with**

- **Water:** Fully miscible.

- **Solvent content:**

- **Organic solvents:** 1.9 %
- **VOC content:** 1.9 %

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- **Other information** No further relevant information available.

**10 Stability and reactivity**

- **Reactivity**
  - **Chemical stability**
    - **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
  - **Possibility of hazardous reactions** No dangerous reactions known.
  - **Conditions to avoid** No further relevant information available.
  - **Incompatible materials:** No further relevant information available.
  - **Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

- **Information on toxicological effects**
  - **Additional toxicological information:**  
The product is not subject to classification according to internally approved calculation methods for preparations:  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

**12 Ecological information**

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

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· **Other adverse effects** No further relevant information available.

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**13 Disposal considerations**

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

**14 Transport information**

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

**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 glycerol

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

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**Safety Data Sheet**  
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Printing date 08/10/2015

Reviewed on 07/08/2015

**Trade name: PK - Proteinase K, 0.2 ml**

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

**· Proposition 65**

**· Chemicals known to cause cancer:**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

**· Cancerogenity categories**

**· EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

**· National regulations:**

Class	Share in %
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.

USA - Clinical Diagnostic Group  
Bio-Rad Laboratories  
4000 Alfred Nobel Drive  
Hercules, California 94547  
Phone: +1(510) 724-7000

**· Department issuing SDS:**

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

**· Contact:**

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

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

**· Date of preparation / last revision** 08/10/2015 / 1

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**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

**Trade name: PK - Proteinase K, 0.2 ml**

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**· Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
ICAO: International Civil Aviation Organisation  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
VOC: Volatile Organic Compounds (USA, EU)  
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A  
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1  
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

USA

**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

**1 Identification**· **Product identifier**

- **Trade name: BI - Blocking solution (10x), 10 ml**
  - **Article number:** 5177E
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
  - **Application of the substance / the mixture** Laboratory reagent or component.

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

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

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

See item 16

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

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

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

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

or ACCIDENT with this product.

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

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

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

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

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

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

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

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

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

· **Hazard statements**

May cause an allergic skin reaction.

· **Precautionary statements**

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

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

If on skin: Wash with plenty of water.

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USA



## Safety Data Sheet

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

(Contd. of page 1)

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

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

Health = 0

Fire = 0

Reactivity = 0

**· HMIS-ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

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

 · **PBT:** Not applicable.

 · **vPvB:** Not applicable.

### 3 Composition/information on ingredients

**· Chemical characterization: Mixtures**

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

**· Dangerous components:**

56-81-5	glycerol	25-50%
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) Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 Skin Corr. 1B, H314 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sens. 1, H317	<0.01%

### 4 First-aid measures

**· Description of first aid measures**

 · **After inhalation:** Supply fresh air and to be sure call for a doctor.

 · **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

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

 · **After swallowing:** Immediately call a doctor.

**· Information for doctor:**

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

No further relevant information available.

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

No further relevant information available.

### 5 Fire-fighting measures

**· Extinguishing media**
**· Suitable extinguishing agents:**

Use fire fighting measures that suit the environment.

 CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.

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

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**Safety Data Sheet**  
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Reviewed on 07/08/2015

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

(Contd. of page 2)

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

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Wear disposable gloves.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**  
Absorb liquid components with liquid-binding material.  
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.
- **Control parameters**

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

**56-81-5 glycerol**

PEL ()	15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV ()	10* ppm *Mist

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

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

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**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

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

(Contd. of page 3)

- **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:** Yellowish
- **Odor:** 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 %
- **VOC content:** 30.0 %

· **Other information** No further relevant information available.**10 Stability and reactivity**· **Reactivity**· **Chemical stability**· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known.· **Conditions to avoid** No further relevant information available.· **Incompatible materials:** No further relevant information available.· **Hazardous decomposition products:** No dangerous decomposition products known.**11 Toxicological information**· **Information on toxicological effects**· **Additional toxicological information:**

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

(Contd. on page 5)

USA

**Safety Data Sheet**  
29 CFR Part 1910.1200

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Reviewed on 07/08/2015

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

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**· Carcinogenic categories**

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

**12 Ecological information**

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

**14 Transport information**

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

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**Safety Data Sheet**  
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Printing date 08/10/2015

Reviewed on 07/08/2015

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

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- |  |                 |
|--|-----------------|
| · <b>Packing group</b>   |                 |
| · DOT, ADR, IMDG, IATA   | Void            |
| · <b>Environmental hazards:</b>  |                 |
| · Marine pollutant:  | No              |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | -               |

**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 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

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

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

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**· 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.

USA - Clinical Diagnostic Group  
Bio-Rad Laboratories  
4000 Alfred Nobel Drive  
Hercules, California 94547  
Phone: +1(510) 724-7000

**· Department issuing SDS:**

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

**· Contact:**

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

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

**· Date of preparation / last revision** 08/10/2015 / -

**· Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
ICAO: International Civil Aviation Organisation  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
VOC: Volatile Organic Compounds (USA, EU)  
Acute Tox. 3: Acute toxicity, Hazard Category 3  
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B  
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1  
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

**1 Identification****· Product identifier**

- **Trade name: Ab Ctrl - Control Ab (10x), 8 ml**
  - **Article number:** 5177F
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
  - **Application of the substance / the mixture** Laboratory reagent or component.

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

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

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

See item 16

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

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

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

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

or ACCIDENT with this product.

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

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

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

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

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

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

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

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

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

**· Hazard statements**

May cause an allergic skin reaction.

**· Precautionary statements**

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

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

If on skin: Wash with plenty of water.

(Contd. on page 2)

USA

## Safety Data Sheet

29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

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

(Contd. of page 1)

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

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

Health = 0

Fire = 0

Reactivity = 0

**· HMIS-ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

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

 · **PBT:** Not applicable.





 · **vPvB:** Not applicable.

### 3 Composition/information on ingredients

**· Chemical characterization: Mixtures**

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

**· Dangerous components:**

56-81-5	glycerol	25-50%
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)  Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331  Skin Corr. 1B, H314  Aquatic Acute 1, H400; Aquatic Chronic 1, H410  Skin Sens. 1, H317	<0.01%

### 4 First-aid measures

**· Description of first aid measures**

 · **After inhalation:** Supply fresh air and to be sure call for a doctor.

 · **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

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

 · **After swallowing:** Immediately call a doctor.

**· Information for doctor:**

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

No further relevant information available.

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

No further relevant information available.

### 5 Fire-fighting measures

**· Extinguishing media**
**· Suitable extinguishing agents:**

Use fire fighting measures that suit the environment.

 CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.

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

(Contd. on page 3)



**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

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

(Contd. of page 2)

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

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Wear disposable gloves.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**  
Absorb liquid components with liquid-binding material.  
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.
- **Control parameters**

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

**56-81-5 glycerol**

PEL ()	15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV ()	10* ppm *Mist

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

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

(Contd. on page 4)

**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

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

(Contd. of page 3)

- **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:** Yellowish
- **Odor:** 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 %
- **VOC content:** 30.0 %

- **Other information** No further relevant information available.

**10 Stability and reactivity**· **Reactivity**· **Chemical stability**· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

- **Possibility of hazardous reactions** No dangerous reactions known.

- **Conditions to avoid** No further relevant information available.

- **Incompatible materials:** No further relevant information available.

- **Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**· **Information on toxicological effects**· **Additional toxicological information:**

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

(Contd. on page 5)

USA

**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

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

(Contd. of page 4)

**· Carcinogenic categories**

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

**12 Ecological information**

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

**14 Transport information**

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

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**Safety Data Sheet**  
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**Trade name: Ab Ctrl - Control Ab (10x), 8 ml**

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· <b>Packing group</b>	
· DOT, ADR, IMDG, IATA	Void
· <b>Environmental hazards:</b>	
· Marine pollutant:	No
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	-

**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 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

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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**Safety Data Sheet**  
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**Trade name: Ab Ctrl - Control Ab (10x), 8 ml**

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**· 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.

USA - Clinical Diagnostic Group

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Hercules, California 94547

Phone: +1(510) 724-7000

**· Department issuing SDS:**

SDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

**· Contact:**

Customer Support

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

USA

Bio-Rad Laboratories

6565 185th Avenue NE

Redmond, WA 98052-5039

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

**· Date of preparation / last revision** 08/10/2015 / -**· Abbreviations and acronyms:**

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

ICAO: International Civil Aviation Organisation

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

Acute Tox. 3: Acute toxicity, Hazard Category 3

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

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

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

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

**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

**1 Identification****· Product identifier**

- **Trade name: Ab Test - Test Ab (10x), 4 ml**
  - **Article number:** 5177G
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
  - **Application of the substance / the mixture** Laboratory reagent or component.

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

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

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

See item 16

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

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

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

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

or ACCIDENT with this product.

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

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

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

GHS07

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

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

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

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

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

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

**· Hazard statements**

May cause an allergic skin reaction.

**· Precautionary statements**

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

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

If on skin: Wash with plenty of water.

(Contd. on page 2)

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## Safety Data Sheet

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

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

- **Classification system:**

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

- Health = 0

- Fire = 0

- Reactivity = 0

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

- Health = 0

- Fire = 0

- Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.





- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

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

- **Dangerous components:**

56-81-5	glycerol	25-50%
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)  Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331  Skin Corr. 1B, H314  Aquatic Acute 1, H400; Aquatic Chronic 1, H410  Skin Sens. 1, H317	<0.01%

### 4 First-aid measures

- **Description of first aid measures**

- **After inhalation:** Supply fresh air and to be sure call for a doctor.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

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

- **After swallowing:** Immediately call a doctor.

- **Information for doctor:**

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

- No further relevant information available.

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

- No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

- Use fire fighting measures that suit the environment.

- CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.

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

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

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

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Wear disposable gloves.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**  
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.
- **Control parameters**

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

**56-81-5 glycerol**

PEL ()	15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV ()	10* ppm *Mist

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

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

(Contd. on page 4)



**Safety Data Sheet**  
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**Trade name: Ab Test - Test Ab (10x), 4 ml**

(Contd. of page 3)

- **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:** Yellowish
- **Odor:** 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 %
- **VOC content:** 30.0 %

· **Other information** No further relevant information available.**10 Stability and reactivity**· **Reactivity**· **Chemical stability**· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known.· **Conditions to avoid** No further relevant information available.· **Incompatible materials:** No further relevant information available.· **Hazardous decomposition products:** No dangerous decomposition products known.**11 Toxicological information**· **Information on toxicological effects**· **Additional toxicological information:**

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

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USA

**Safety Data Sheet**  
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Reviewed on 07/08/2015

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

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**· Carcinogenic categories**

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

**12 Ecological information**

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

**14 Transport information**

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

(Contd. on page 6)

**Safety Data Sheet**  
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Reviewed on 07/08/2015

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

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· <b>Packing group</b>	
· DOT, ADR, IMDG, IATA	Void
· <b>Environmental hazards:</b>	
· Marine pollutant:	No
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	-

**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	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

· **Proposition 65**

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

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

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

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

· **Carcinogeny categories**

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

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

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

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**Safety Data Sheet**  
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Printing date 08/10/2015

Reviewed on 07/08/2015

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

(Contd. of page 6)

**· 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.

USA - Clinical Diagnostic Group

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Hercules, California 94547

Phone: +1(510) 724-7000

**· Department issuing SDS:**

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Marnes-la-Coquette, France

**· Contact:**

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Bio-Rad Laboratories

6565 185th Avenue NE

Redmond, WA 98052-5039

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

**· Date of preparation / last revision** 08/10/2015 / -**· Abbreviations and acronyms:**

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

ICAO: International Civil Aviation Organisation

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

Acute Tox. 3: Acute toxicity, Hazard Category 3

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

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

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

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

**Safety Data Sheet**  
29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

**1 Identification**· **Product identifier**

- **Trade name: Ab II - Conjugate (10x), 14 ml**
  - **Article number:** 5177H
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
  - **Application of the substance / the mixture** Laboratory reagent or component.

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

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

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

See item 16

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

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

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

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

or ACCIDENT with this product.

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

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

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

GHS07

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

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

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

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

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

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

· **Hazard statements**

May cause an allergic skin reaction.

· **Precautionary statements**

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

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

If on skin: Wash with plenty of water.

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USA

## Safety Data Sheet

29 CFR Part 1910.1200

Printing date 08/10/2015

Reviewed on 07/08/2015

**Trade name: Ab II - Conjugate (10x), 14 ml**

(Contd. of page 1)

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

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

### 3 Composition/information on ingredients

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

- **Dangerous components:**

55965-84-9	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	<0.01%
	<ul style="list-style-type: none"> <li> Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331</li> <li> Skin Corr. 1B, H314</li> <li> Aquatic Acute 1, H400; Aquatic Chronic 1, H410</li> <li> Skin Sens. 1, H317</li> </ul>	

### 4 First-aid measures

- **Description of first aid measures**
  - **After inhalation:** Supply fresh air and to be sure call for a doctor.
  - **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
  - **After eye contact:** Rinse opened eye for several minutes under running water.
  - **After swallowing:** Immediately call a doctor.
- **Information for doctor:**
  - **Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
  - **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:**  
Use fire fighting measures that suit the environment.  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.
- **Special hazards arising from the substance or mixture** No further relevant information available.

(Contd. on page 3)

**Safety Data Sheet**  
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Printing date 08/10/2015

Reviewed on 07/08/2015

**Trade name: Ab II - Conjugate (10x), 14 ml**

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

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

Wear protective clothing.

Wear disposable gloves.

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

**· Methods and material for containment and cleaning up:**

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.

**· Control parameters**

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

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

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

**· Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

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

- **Protection of hands:** Protective gloves

- **Eye protection:** Safety glasses

USA

(Contd. on page 4)

**Safety Data Sheet**  
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Reviewed on 07/08/2015

**Trade name: Ab II - Conjugate (10x), 14 ml**

(Contd. of page 3)

**9 Physical and chemical properties**

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

· **General Information**

· **Appearance:**

- **Form:** Fluid
- **Color:** Yellowish
- **Odor:** 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**

· **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.

(Contd. on page 5)



**Safety Data Sheet**  
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**Trade name: Ab II - Conjugate (10x), 14 ml**

(Contd. of page 4)

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

None of the ingredients is listed.

**12 Ecological information**

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

**14 Transport information**

- |                                       |                 |
|---------------------------------------|-----------------|
| · <b>UN-Number</b>                    |                 |
| · DOT, ADR, ADN, IMDG, IATA           | Void            |
| · <b>UN proper shipping name</b>      |                 |
| · DOT, ADN, IMDG, IATA                | Void            |
| · ADR                                 | Void            |
| · <b>Transport hazard class(es)</b>   |                 |
| · DOT, ADR, ADN, IMDG, IATA           |                 |
| · Class                               | Void            |
| · <b>Packing group</b>                |                 |
| · DOT, ADR, IMDG, IATA                | Void            |
| · <b>Environmental hazards:</b>       |                 |
| · <b>Marine pollutant:</b>            | No              |
| · <b>Special precautions for user</b> | Not applicable. |

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- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

**15 Regulatory information**

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

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

None of the ingredient is listed.

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

None of the ingredients is listed.

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

26172-54-3	2-Methyl-2h-isothiazol--onhydrochlorid
30007-47-7	5-Bromo-5-nitro-1,3-dioxane
7732-18-5	water, distilled, conductivity or of similar purity

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

**16 Other information**

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

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**· Department issuing SDS:**

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

**· Contact:**

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USA  
Bio-Rad Laboratories  
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Redmond, WA 98052-5039

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**· Date of preparation / last revision** 08/10/2015 / -**· Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
ICAO: International Civil Aviation Organisation  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
Acute Tox. 3: Acute toxicity, Hazard Category 3  
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B  
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1  
Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

USA