

**KIT COMPONENTS**Product name: **TeSeE sheep/goat Purification kit (192 tests)**Product code: **3551165**

Article number	Description	Quantity	Symbols
5144A	Grinding Tubes, 96 Tubes	2	GHS07
5165B	Réactif 1 - Solution de Dénaturation (55 mL)	1	GHS07
5165C	Réactif 2 - Solution Clarifiante (55 mL)	1	GHS02 GHS07 GHS05
5165D	Réactif 3 - Tampon de Solubilisation (7 mL)	1	
5144E	PK - Proteinase K (0.5 mL)	1	GHS08

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

### 1 Identification

· **Product identifier**

· **Trade name:** Grinding Tubes, 96 Tubes

· **Article number:** 5144A

· **Application of the substance / the mixture** Laboratory reagent or component.

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

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

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

· **Information department:** Customer support.

· **Emergency telephone number:** See item 16

### 2 Hazard identification

· **Classification of the substance or mixture**



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

Aquatic Acute 3 H402 Harmful to aquatic life.

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

· **Label elements**

· **GHS label elements**

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

· **Hazard pictograms** GHS07

· **Signal word** Warning

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

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

· **Hazard statements**

May cause an allergic skin reaction.

Harmful to aquatic life.

Harmful to aquatic life with long lasting effects.

(Contd. on page 2)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Grinding Tubes, 96 Tubes**

(Contd. of page 1)

- **Precautionary statements**

- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective gloves.
- If on skin: Wash with plenty of soap and water.
- Take off contaminated clothing and wash it before reuse.
- If skin irritation or rash occurs: Get medical advice/attention.
- Specific treatment (see on this label).
- Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

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

Health = 0  
Fire = 0  
Reactivity = 0

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

Health = 0  
Fire = 0  
Reactivity = 0

### 3 Composition/Information on ingredients

- **Chemical characterization: Mixtures**

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

- **Dangerous components:**

55965-84-9	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	≤0.1% w/w
	<ul style="list-style-type: none"> <li>⚠ Acute Toxicity (Oral) - Category 3, H301; Acute Toxicity (Dermal) - Category 2, H310; Acute Toxicity (Inhalation) - Category 2, H330</li> <li>⚠ Skin Corrosion - Category 1C, H314; Serious Eye Damage - Category 1, H318</li> <li>⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410</li> <li>⚠ Skin Sensitizer - Category 1A, 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.

(Contd. on page 3)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Grinding Tubes, 96 Tubes**

(Contd. of page 2)

- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:**  
Use fire fighting measures that suit the environment.  
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 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 with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

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

CDN

(Contd. on page 4)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Grinding Tubes, 96 Tubes**

(Contd. of page 3)

### 8 Exposure controls/ Personal protection

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

### 10 Stability and reactivity

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

(Contd. on page 5)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Grinding Tubes, 96 Tubes**

(Contd. of page 4)

- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

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

- **Additional toxicological information:**

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

Irritant

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

### 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Avoid transfer into the environment.

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

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

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

### 13 Disposal considerations

- **Waste treatment methods**

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

(Contd. on page 6)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Grinding Tubes, 96 Tubes**

(Contd. of page 5)

- **Uncleaned packagings:**

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

### 14 Transport information

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

### 15 Regulatory information

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

· <b>Section 355 (extremely hazardous substances):</b>	
26628-22-8	Sodium Azide
· <b>Section 313 (Specific toxic chemical listings):</b>	
26628-22-8	Sodium Azide
· <b>TSCA (Toxic Substances Control Act):</b>	
50-99-7	glucose
26628-22-8	Sodium Azide
7732-18-5	water, distilled, conductivity or of similar purity
· <b>Canadian substance listings:</b>	
· <b>Canadian Domestic Substances List (DSL)</b>	
50-99-7	glucose
26628-22-8	Sodium Azide

(Contd. on page 7)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Grinding Tubes, 96 Tubes**

(Contd. of page 6)

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

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

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

### 16 Other information

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

· **Department issuing SDS:**

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

· **Contact:**

Customer Support

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

Customer Support

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

· **Abbreviations and acronyms:**

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative



## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

### 1 Identification

· **Product identifier**

- **Trade name: Réactif 1 - Solution de Dénaturation (55 mL)**
  - **Article number:** 5165B
  - **Application of the substance / the mixture** Laboratory reagent or component.

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

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

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

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

### 2 Hazard identification

· **Classification of the substance or mixture**



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

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

· **Label elements**

· **GHS label elements**

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

· **Hazard pictograms** GHS07

· **Signal word** Warning

· **Hazard statements**

Causes serious eye irritation.  
Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

Wash thoroughly after handling.  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
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.

(Contd. on page 2)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 1 - Solution de Dénaturation (55 mL)**

(Contd. of page 1)

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 2

Fire = 0





Reactivity = 0

### 3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

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

· **Dangerous components:**

151-21-3	sodium dodecyl sulphate	5-10% w/w *
	 Acute Toxicity (Dermal) – Category 3, H311  Acute Toxicity (Oral) - Category 4, H302; Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319	
	IGEPAL® CA-630	1-5% w/w *
	 Aquatic Chronic 2, H411  Acute Toxicity (Oral) - Category 4, H302; Eye Irritation - Category 2A, H319	

\* Actual concentration ranges are withheld as a trade secret.

### 4 First-aid measures

· **Description of first aid measures**

· **General information:** No special measures required.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

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

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

· **Information for doctor:**

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

No further relevant information available.

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

No further relevant information available.

### 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

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

(Contd. on page 3)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 1 - Solution de Dénaturation (55 mL)**

(Contd. of page 2)

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

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear disposable gloves.
- **Environmental precautions:**
  - Dilute with plenty of water.
  - Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections** No dangerous substances are released.

### 7 Handling and storage

- **Handling:**
  - **Precautions for safe handling**
    - Keep receptacles tightly sealed.
    - Avoid all contact with reagents, even those considered to be non-hazardous.
    - Follow good laboratory practices.
  - **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - **Requirements to be met by storerooms and receptacles:** No special requirements.
    - **Information about storage in one common storage facility:** Not required.
    - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/ Personal protection

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

(Contd. on page 4)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 1 - Solution de Dénaturation (55 mL)**

(Contd. of page 3)

- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Eye protection:** Goggles recommended during refilling.

### 9 Physical and chemical properties

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

##### · General Information

##### · Appearance:

- **Form:** Fluid
- **Color:** According to product specification
- **Odor:** Characteristic

##### · 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.

- **Vapor pressure at 20 °C:** 23 hPa

- **Density:** Not determined.

##### · Solubility in / Miscibility with

- **Water:** Fully miscible.

##### · Solvent content:

- **Organic solvents:** 0.0 %
- **Water:** 75.0 %

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

### 10 Stability and reactivity

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

##### · Chemical stability

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

No decomposition if used according to specifications.

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

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

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

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

CDN

(Contd. on page 5)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 1 - Solution de Dénaturation (55 mL)**

(Contd. of page 4)

### 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** No irritating effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

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

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

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

### 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 2 (Self-assessment): hazardous for water

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

Danger to drinking water if even small quantities leak into the ground.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

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

### 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

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

(Contd. on page 6)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 1 - Solution de Dénaturation (55 mL)**

(Contd. of page 5)

- **Uncleaned packagings:**

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

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- **UN-Number**

- DOT/TDG, ADR, ADN, IMDG, IATA

Void

- **UN proper shipping name**

- DOT/TDG, ADR, ADN, IMDG, IATA

Void

- **Transport hazard class(es)**

- DOT, ADR, ADN, IMDG, IATA

- Class

Void

- **Packing group**

- DOT/TDG, ADR, IMDG, IATA

Void

- **Environmental hazards:**

- Marine pollutant:

No

- **Special precautions for user**

Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

- **Transport/Additional information:**

Not dangerous according to the above specifications.

- **UN "Model Regulation":**

Void

### 15 Regulatory information

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

- Sara

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

None of the ingredient is listed.

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

None of the ingredients is listed.

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

57-13-6 urea

151-21-3 sodium dodecyl sulphate

IGEPAL® CA-630

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

(Contd. on page 7)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 1 - Solution de Dénaturation (55 mL)**

(Contd. of page 6)

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

151-21-3 sodium dodecyl sulphate

IGEPA<sup>®</sup> CA-630

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

### 16 Other information

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

· **Department issuing SDS:**

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

· **Contact:**

Customer Support

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

Customer Support

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

· **Abbreviations and acronyms:**

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

### 1 Identification

· **Product identifier**

· **Trade name: Réactif 2 - Solution Clarifiante (55 mL)**

· **Article number:** 5165C

· **Application of the substance / the mixture** Laboratory reagent or component.

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

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

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

· **Information department:** Customer support.

· **Emergency telephone number:** See item 16

### 2 Hazard identification

· **Classification of the substance or mixture**



Flame

Flammable Liquids - Category 3

H226

Flammable liquid and vapour.



Corrosion

Serious Eye Damage - Category 1

H318

Causes serious eye damage.



Acute Toxicity (Oral) - Category 4

H302

Harmful if swallowed.

Skin Irritation - Category 2

H315

Causes skin irritation.

Specific Target Organ Toxicity - Single Exposure - Category 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

(Contd. on page 2)

CDN



## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 2 - Solution Clarifiante (55 mL)**

(Contd. of page 1)

· **Signal word** Danger

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

butan-1-ol

· **Hazard statements**

Flammable liquid and vapour.

Harmful if swallowed.

Causes skin irritation.

Causes serious eye damage.

May cause respiratory irritation. May cause drowsiness or dizziness.

· **Precautionary statements**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Ground and bond container and receiving equipment.

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

Use non-sparking tools.

Take actions to prevent static discharges.

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

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

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

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

Immediately call a poison center/doctor.

Specific treatment (see on this label).

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

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

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

Rinse mouth.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

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

Store in a well-ventilated place. Keep cool.

Store locked up.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**

Health = 3

Fire = 3

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = \*3

Fire = 3

Reactivity = 0

CDN

(Contd. on page 3)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 2 - Solution Clarifiante (55 mL)**




(Contd. of page 2)

### 3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

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

· **Dangerous components:**

71-36-3	butan-1-ol	80-100% w/w *
	<ul style="list-style-type: none"> <li> Flammable Liquids - Category 3, H226</li> <li> Serious Eye Damage - Category 1, H318</li> <li> Acute Toxicity (Oral) - Category 4, H302; Skin Irritation - Category 2, H315; Specific Target Organ Toxicity - Single Exposure - Category 3, H335-H336</li> </ul>	

\* Actual concentration ranges are withheld as a trade secret.

### 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:** 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:**

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 to enter sewers/ surface or ground water.

(Contd. on page 4)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 2 - Solution Clarifiante (55 mL)**

(Contd. of page 3)

- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
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**

· <b>Components with limit values that require monitoring at the workplace:</b>
---

<b>71-36-3 butan-1-ol</b>
---------------------------

EL ()	Short-term value: C 30 ppm Long-term value: 15 ppm
-------	---

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
  - **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
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.

(Contd. on page 5)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 2 - Solution Clarifiante (55 mL)**

(Contd. of page 4)

- **Breathing equipment:**

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

- **Protection of hands:**

Protective gloves

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

- **Eye protection:** Tightly sealed goggles

### 9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

- **Form:**

Fluid

- **Color:**

According to product specification

- **Odor:**

Characteristic

- **pH-value at 20 °C:** 6.1

- **Change in condition**

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

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

- **Flash point:** 35 °C

- **Ignition temperature:** 340 °C

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

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits:**

- **Lower:** 1.5 Vol %

- **Upper:** 9.4 Vol %

- **Vapor pressure at 20 °C:** 6.7 hPa

- **Density:** Not determined.

- **Solubility in / Miscibility with**

- **Water:** Fully miscible.

- **Solvent content:**

- **Organic solvents:** 100.0 %

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

CDN

(Contd. on page 6)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 2 - Solution Clarifiante (55 mL)**

(Contd. of page 5)

### 10 Stability and reactivity

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

### 11 Toxicological information

#### · Information on toxicological effects

##### · Acute toxicity:

##### · LD/LC50 values that are relevant for classification:

##### 71-36-3 butan-1-ol

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

##### · Primary irritant effect:

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.

##### · Sensitization: No sensitizing effects known.

##### · Additional toxicological information:

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

Harmful

Irritant

##### · Carcinogenic categories

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

None of the ingredients is listed.

##### · NTP (National Toxicology Program)

None of the ingredients is listed.

### 12 Ecological information

#### · Toxicity

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
  - **Bioaccumulative potential** No further relevant information available.

(Contd. on page 7)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 2 - Solution Clarifiante (55 mL)**



(Contd. of page 6)

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

### 13 Disposal considerations

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

### 14 Transport information

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>DOT/TDG</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | <p>UN1120<br/>1120</p>                              |
| <ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>  | <p>1120 BUTANOLS, mixture<br/>BUTANOLS, mixture</p> |
| <ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b> <ul style="list-style-type: none"> <li>· <b>DOT/TDG (Transport dangerous goods):</b></li> </ul> </li> </ul>   |   |
| <div style="display: flex; align-items: center;">  <div> <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul> </div> </div> |   |
| <div style="display: flex; align-items: center;">  <div> <ul style="list-style-type: none"> <li>· <b>Class</b></li> </ul> </div> </div>                         |   |
| <div style="display: flex; align-items: center;"> <div style="width: 30%;"></div> <div> <p>3 Flammable liquids<br/>3</p> <hr style="border-top: 1px dashed #ccc;"/> <p>3 (F1) Flammable liquids</p> </div> </div>  |   |

(Contd. on page 8)

CDN

## Safety Data Sheet


according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 2 - Solution Clarifiante (55 mL)**

(Contd. of page 7)

· Label	3
· IMDG, IATA	
	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT/TDG, ADR, IMDG, IATA	III
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids
· Hazard identification number (Kemler code):	30
· EMS Number:	F-E,S-D
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	UN1120, BUTANOLS, mixture, 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):

71-36-3 | butan-1-ol

62625-28-9 | Bleu de Bromophenol

#### · Canadian substance listings:

##### · Canadian Domestic Substances List (DSL)

All ingredients are listed.

##### · Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

##### · Canadian Ingredient Disclosure list (limit 1%)

All ingredients are listed.

(Contd. on page 9)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 2 - Solution Clarifiante (55 mL)**

(Contd. of page 8)

· **National regulations:**

Class	Share in %
NK	100.0

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

### 16 Other information

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

· **Department issuing SDS:**

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

· **Contact:**

Customer Support

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

Customer Support

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

· **Abbreviations and acronyms:**

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative



## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

### 1 Identification

- **Product identifier**

- **Trade name: Réactif 3 - Tampon de Solubilisation (7 mL)**
  - **Article number:** 5165D
  - **Application of the substance / the mixture** Laboratory reagent or component.

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

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

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

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

### 2 Hazard identification

- **Classification of the substance or mixture**

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

- **Label elements**

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

- **Classification system:**

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

Health = 0

Fire = 0

Reactivity = 0

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

Health = 0

Fire = 0

Reactivity = 0

CDN

(Contd. on page 2)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

Trade name: Réactif 3 - Tampon de Solubilisation (7 mL)

(Contd. of page 1)

### 3 Composition/Information on ingredients

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

### 4 First-aid measures

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

### 5 Fire-fighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:**  
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 to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections** No dangerous substances are released.

CDN

(Contd. on page 3)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 3 - Tampon de Solubilisation (7 mL)**

(Contd. of page 2)

### 7 Handling and storage

- **Handling:**
  - **Precautions for safe handling**  
Keep receptacles tightly sealed.  
Avoid all contact with reagents, even those considered to be non-hazardous.  
Follow good laboratory practices.
  - **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - **Requirements to be met by storerooms and receptacles:** No special requirements.
    - **Information about storage in one common storage facility:** Not required.
    - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/ Personal protection

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

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - **Form:** Fluid
      - **Color:** According to product specification
    - **Odor:** Characteristic
  - **Change in condition**
    - **Melting point/Melting range:** Undetermined.
    - **Boiling point/Boiling range:** Undetermined.

(Contd. on page 4)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 3 - Tampon de Solubilisation (7 mL)**

(Contd. of page 3)

· <b>Flash point:</b>	Not applicable.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Vapor pressure at 20 °C:</b>	23 hPa
· <b>Density:</b>	Not determined.
· <b>Solubility in / Miscibility with</b>	
· <b>Water:</b>	Fully miscible.
· <b>Solvent content:</b>	
· <b>Organic solvents:</b>	0.0 %
· <b>Water:</b>	60.6 %
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

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

### 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:**
    - **Primary irritant effect:**
      - **on the skin:** No irritant effect.
      - **on the eye:** No irritating effect.
    - **Sensitization:** No sensitizing effects known.
  - **Additional toxicological information:**  
The product is not subject to classification according to internally approved calculation methods for preparations:  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
  - **Carcinogenic categories**

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

None of the ingredients is listed.

(Contd. on page 5)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 3 - Tampon de Solubilisation (7 mL)**

(Contd. of page 4)

### · NTP (National Toxicology Program)

None of the ingredients is listed.

## 12 Ecological information

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

## 13 Disposal considerations

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

## 14 Transport information

- |   |      |
|---|------|
| <ul style="list-style-type: none"> <li>· <b>UN-Number</b> <ul style="list-style-type: none"> <li>· DOT/TDG, ADR, ADN, IMDG, IATA</li> </ul> </li> </ul>                               | Void |
| <ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b> <ul style="list-style-type: none"> <li>· DOT/TDG, ADR, ADN, IMDG, IATA</li> </ul> </li> </ul>                 | Void |
| <ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b> <ul style="list-style-type: none"> <li>· DOT, ADR, ADN, IMDG, IATA</li> <li>· Class</li> </ul> </li> </ul> | Void |

(Contd. on page 6)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 3 - Tampon de Solubilisation (7 mL)**

(Contd. of page 5)

· <b>Packing group</b>	
· DOT/TDG, 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>	Void

### 15 Regulatory information

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

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

None of the ingredient is listed.

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

None of the ingredients is listed.

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

57-13-6 urea

137-16-6 Sarkosyl

18015-76-4 malachite green oxalate

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

#### · Canadian substance listings:

##### · Canadian Domestic Substances List (DSL)

All ingredients are listed.

##### · Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

##### · Canadian Ingredient Disclosure list (limit 1%)

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.

(Contd. on page 7)

CDN

**Safety Data Sheet**  
according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

**Trade name: Réactif 3 - Tampon de Solubilisation (7 mL)**

(Contd. of page 6)

**· Department issuing SDS:**

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

**· Contact:**

Customer Support  
Phone : +33 (0)1 47 95 62 77  
Customer Support  
Phone : +33 (0)1 47 95 61 85

**· Abbreviations and acronyms:**

ICAO: International Civil Aviation Organisation  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 09/29/2015

### 1 Identification

· **Product identifier**

· **Trade name:** PK - Proteinase K (0.5 mL)

· **Article number:**

5144E

5169M

· **Application of the substance / the mixture** Laboratory reagent or component.

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Bio-Rad

3 boulevard Raymond-Poincaré

92430 Marnes-la-Coquette

Phone: +33 (0)1 47 95 60 00

Fax: +33 (0)1 47 41 91 33

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

Bio-Rad laboratories (Canada) Ltd.

2403 Guénette Montreal,

Montréal (Québec) H4R 2E9

Phone: (800) 361-1808

Fax: (514) 334-0872

· **Information department:** Customer support.

· **Emergency telephone number:** See item 16

### 2 Hazard identification

· **Classification of the substance or mixture**



Health hazard

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

· **Label elements**

· **GHS label elements**

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

· **Hazard pictograms** GHS08

· **Signal word** Danger

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

Proteinase, Tritirachium album serine

· **Hazard statements**

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

· **Precautionary statements**

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

[In case of inadequate ventilation] wear respiratory protection.

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

(Contd. on page 2)

CDN



## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 09/29/2015

**Trade name: PK - Proteinase K (0.5 mL)**

(Contd. of page 1)

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

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = \*0

Fire = 0



Reactivity = 0

### 3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

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

· **Dangerous components:**

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

\* Actual concentration ranges are withheld as a trade secret.

### 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

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

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

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

· **Information for doctor:**

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

No further relevant information available.

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

No further relevant information available.

### 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

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

Use fire fighting measures that suit the environment.

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

(Contd. on page 3)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 09/29/2015

Trade name: PK - Proteinase K (0.5 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.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**  
Absorb liquid components with liquid-binding material.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

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

### 8 Exposure controls/ Personal protection

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

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

#### 56-81-5 glycerol

EL	Long-term value: 10* 3** mg/m <sup>3</sup> *mist; **mist, resirable
EV	Long-term value: 10 mg/m <sup>3</sup>

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
  - **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
  - **Breathing equipment:** Suitable respiratory protective device recommended.
  - **Protection of hands:** Protective gloves

(Contd. on page 4)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 09/29/2015

Trade name: PK - Proteinase K (0.5 mL)

· **Eye protection:** Safety glasses

(Contd. of page 3)

### 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

· **Form:** Fluid

· **Color:** Red

· **Odor:** Weak, characteristic

· **pH-value:** Not determined.

· **Change in condition**

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

· **Flash point:** Not applicable.

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

· **Density:** Not determined.

· **Solubility in / Miscibility with**

· **Water:** Fully miscible.

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

### 10 Stability and reactivity

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

· **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:

Harmful

(Contd. on page 5)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 09/29/2015

**Trade name: PK - Proteinase K (0.5 mL)**

(Contd. of page 4)

### · Carcinogenic categories

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

None of the ingredients is listed.

#### · NTP (National Toxicology Program)

None of the ingredients is listed.

## 12 Ecological information

### · Toxicity

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

### · Behavior in environmental systems:

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

### · Additional ecological information:

· **General notes:** Avoid transfer into the environment.

### · Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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

## 13 Disposal considerations

### · Waste treatment methods

· **Recommendation:** Must be specially treated adhering to official regulations.

### · Uncleaned packagings:

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

## 14 Transport information

### · UN-Number

· DOT/TDG, ADR, ADN, IMDG, IATA      Void

### · UN proper shipping name

· DOT/TDG, ADR, ADN, IMDG, IATA      Void

### · Transport hazard class(es)

· DOT, ADR, ADN, IMDG, IATA  
· Class      Void

### · Packing group

· DOT/TDG, ADR, IMDG, IATA      Void

(Contd. on page 6)

CDN

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 09/29/2015

**Trade name: PK - Proteinase K (0.5 mL)**

(Contd. of page 5)

· <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>	Void

### 15 Regulatory information

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

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

None of the ingredient is listed.

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

None of the ingredients is listed.

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

56-81-5	glycerol
34487-61-1	sodium hydrogen 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bisphenolate S,S-dioxide
7732-18-5	water, distilled, conductivity or of similar purity

#### · **Canadian substance listings:**

##### · **Canadian Domestic Substances List (DSL)**

56-81-5	glycerol
34487-61-1	sodium hydrogen 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bisphenolate S,S-dioxide
7732-18-5	water, distilled, conductivity or of similar purity

##### · **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

##### · **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

#### · **National regulations:**

Class	Share in %
I	1.7
NK	2.4

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

CDN

(Contd. on page 7)

**Safety Data Sheet**  
according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 09/29/2015

**Trade name: PK - Proteinase K (0.5 mL)**

(Contd. of page 6)

**16 Other information**

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

**· Department issuing SDS:**

MSDS / FDS Administr.

Bio-Rad

Marnes-la-Coquette, France

**· Contact:**

Customer Support

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

Customer Support

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

**· Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

CDN