

KIT COMPONENTSProduct name: **TeSeE™ PURIFICATION KIT, 192 Tests**Product codes: **3551144**, 3551144J

Article number	Description	Quantity	Symbols
5144A	Grinding Tubes, 96 Tubes	2	GHS07
5144B	TeSeE™ PURIFICATION KIT - Tampon A (55 mL)	1	GHS07
5144C	B - Clarifying Solution (55 mL)	1	GHS02 GHS07 GHS05
5144D	C - Resolving Buffer (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.

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

4 First-aid measures

- **Description of first aid measures**

- **After inhalation:** Supply fresh air and to be sure call for a doctor.
 - **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
 - **After eye contact:** Rinse opened eye for several minutes under running water.
 - **After swallowing:** Immediately call a doctor.

- **Information for doctor:**

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

No further relevant information available.

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

5 Fire-fighting measures

- **Extinguishing media**
 - **Suitable extinguishing agents:**
Use fire fighting measures that suit the environment.
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
 - **Protective equipment:** No special measures required.

6 Accidental release measures

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

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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.

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- **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.

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- **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
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

15 Regulatory information

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

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

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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:** TeSeE™ PURIFICATION KIT - Tampon A (55 mL)
- **Article number:** 5144B
- **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.

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Trade name: TeSeE™ PURIFICATION KIT - Tampon A (55 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 = 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 without a chemical hazard.

· **Dangerous components:**

IGEPAL® CA-630	5-10% 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:**

Use fire fighting measures that suit the environment.

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

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

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Trade name: TeSeE™ PURIFICATION KIT - Tampon A (55 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 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 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.
 - Follow good laboratory practices.
 - **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/ Personal protection

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

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Trade name: TeSeE™ PURIFICATION KIT - Tampon A (55 mL)

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· **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

- **Form:** Fluid
- **Color:** Colorless
- **Odor:** Weak, characteristic

· **pH-value at 20 °C:** 8

· **Change in condition**

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

· **Flash point:** Not applicable.

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

· **Density:** Not determined.

· **Solubility in / Miscibility with**

- **Water:** Fully miscible.
- **Other information** No further relevant information available.

10 Stability and reactivity

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

· **Chemical stability**

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

No decomposition if used according to specifications.

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

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

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

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

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

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

· **Additional toxicological information:**

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

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Trade name: TeSeE™ PURIFICATION KIT - Tampon A (55 mL)

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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:**

The product contains materials that are harmful to the environment.

The product may not be released into the environment without control.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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

13 Disposal considerations

· **Waste treatment methods**

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

· **Uncleaned packagings:**

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

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

14 Transport information

· **UN-Number**

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

· **UN proper shipping name**

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

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Trade name: TeSeE™ PURIFICATION KIT - Tampon A (55 mL)

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· 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

IGEPAL® CA-630

137-16-6 Sarkosyl

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%)

IGEPAL® CA-630

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

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Trade name: TeSeE™ PURIFICATION KIT - Tampon A (55 mL)

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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

CDN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

1 Identification

· **Product identifier**

· **Trade name: B - Clarifying Solution (55 mL)**

· **Article number:** 5144C

· **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

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Trade name: B - Clarifying Solution (55 mL)

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- **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.
Use explosion-proof [electrical/ventilating/lighting] equipment.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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

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 *
<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;">    </div> <div> Flammable Liquids - Category 3, H226 Serious Eye Damage - Category 1, H318 Acute Toxicity (Oral) - Category 4, H302; Skin Irritation - Category 2, H315; Specific Target Organ Toxicity - Single Exposure - Category 3, H335-H336 </div> </div>		

* 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.

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Trade name: B - Clarifying Solution (55 mL)

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- **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:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
 - **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**
Absorb liquid components with liquid-binding material.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
 - **Precautions for safe handling** 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.

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Trade name: B - Clarifying Solution (55 mL)

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- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/ Personal protection

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

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

71-36-3 butan-1-ol

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

- **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.
 - **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:	Blue
· Odor:	Characteristic

· pH-value:	Not determined.
--------------------	-----------------

· Change in condition

- **Boiling point/Boiling range:** 119 °C

· Flash point:	35 °C
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· Ignition temperature:	340 °C
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· Auto igniting:	Product is not selfigniting.
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· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
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Trade name: B - Clarifying Solution (55 mL)

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· Explosion limits:	
· Lower:	1.5 Vol %
· Upper:	9.4 Vol %
· Vapor pressure at 20 °C:	6.7 hPa
· Density at 20 °C:	0.8095 g/cm ³
· Solubility in / Miscibility with	
· Water:	Fully miscible.
· Solvent content:	
· Organic solvents:	100.0 %
· 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.

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.

· **Additional toxicological information:**

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

Harmful
Irritant

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Trade name: B - Clarifying Solution (55 mL)

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· 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, IMDG, IATA

UN1120

· UN proper shipping name

· ADR

1120 BUTANOLS, mixture

· IMDG, IATA

BUTANOLS mixture

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Trade name: B - Clarifying Solution (55 mL)

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· Transport hazard class(es)

· DOT/TDG (Transport dangerous goods):



· 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/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

· Stowage Category

A

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

Not applicable.

· Transport/Additional information:

· ADR

· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· IMDG

· Limited quantities (LQ)

5L

· Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

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Trade name: B - Clarifying Solution (55 mL)

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Maximum net quantity per outer packaging: 1000 ml

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.

· **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

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Trade name: B - Clarifying Solution (55 mL)

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· Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
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 07/17/2015

1 Identification

- **Product identifier**

- **Trade name:** C - Resolving Buffer (7 mL)

- **Article number:** 5144D

- **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: C - Resolving Buffer (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:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
 - **Protective equipment:** No special measures required.

6 Accidental release measures

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

CDN

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Safety Data Sheet

according to HPR, Schedule 1

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Reviewed on 07/17/2015

Trade name: C - Resolving Buffer (7 mL)

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7 Handling and storage

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

8 Exposure controls/ Personal protection

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

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
 - **General Information**
 - **Appearance:**
 - **Form:** Fluid
 - **Color:** Green
 - **Odor:** Weak, characteristic
 - **Change in condition**
 - **Melting point/Melting range:** Undetermined.
 - **Boiling point/Boiling range:** Undetermined.

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CDN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

Trade name: C - Resolving Buffer (7 mL)

(Contd. of page 3)

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

10 Stability and reactivity

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

11 Toxicological information

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

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

CDN

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 11/01/2020

Reviewed on 07/17/2015

Trade name: C - Resolving Buffer (7 mL)

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12 Ecological information

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

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

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:**

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

14 Transport information

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

(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: C - Resolving Buffer (7 mL)

(Contd. of page 5)

· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· 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

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.

- **Department issuing SDS:**
MSDS / FDS Administr.
Bio-Rad
Marnes-la-Coquette, France

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Safety Data Sheet
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Trade name: C - Resolving Buffer (7 mL)

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· 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:**

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

Use fire fighting measures that suit the environment.

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

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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 ³ *mist; **mist, respirable
EV	Long-term value: 10 mg/m ³

- **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)

· 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):**

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

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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)

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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