

Printing date 02/13/2017 Reviewed on 02/10/2017

1 Identification

· Product identifier

· Trade name: p-Catecholamines by HPLC, REAG 1

· Article number: 1955881

· Application of the substance / the mixture In-Vitro-laboratory reagent or component

Details of the supplier of the safety data sheet

· Manufacturer/Supplier

Bio-Rad Laboratories (Canada) Ltd.

2403 Guenette Street Montreal, Quebec H4R 2E9 Phone: (514) 334-4372 Freephone: 1 (800) 361-1808 Fax: (514) 334-0872

· Information department:

Technical Support:

E-mail: cdg canada salesmarketing@bio-rad.com

· Emergency telephone number: GBK Gefahrgut Büro GmbH Tel.: 0049(0)6123-84463

2 Hazard(s) identification

· Classification of the substance or mixture

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

- · 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.

· Precautionary statements

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

Wash thoroughly after handling.

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.

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



Health = 2 Fire = 0Reactivity = 0

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· HMIS-ratings (scale 0 - 4)

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2 Health = 2 Fire = 0

REACTIVITY 0 Reactivity = 0

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

77-86-1 trometamol

🕦 Eye Irritation - Category 2A, H319

10-13% w/w

4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: If skin irritation continues, consult a doctor.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing:

Rinse out mouth and then drink plenty of water.

Call a doctor immediately.

- · 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.
- · Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Nitrogen oxides (NOx)

- · Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device.
- · Additional information Cool endangered receptacles with water spray.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

· 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:

Send for recovery or disposal in suitable receptacles.

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

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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

Use only in well ventilated areas.

Keep receptacles tightly sealed.

- · 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:

Store away from foodstuffs.

Store away from oxidizing agents.

- · Further information about storage conditions: Store receptacle in a well ventilated area.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

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

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

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Be sure to clean skin thoroughly after work and before breaks.

Do not eat, drink, smoke or sniff while working.

Wash hands before breaks and at the end of work.

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

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling.

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· Body protection: Protective work clothing

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9 Physical and chemical properties

· Information	on basic	nhysical	and	chemical	nronerties
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· General Information

· Appearance:

Form: Fluid Color: Colorless · Odor: **Odorless** · Odor threshold: Not determined. 8,6

· pH-value at 20 °C:

· Change in condition

Undetermined. Melting point/Melting range: 100 °C Boiling point/Boiling range:

· Flash point: Not applicable. Not applicable.

· Flammability (solid, gaseous): · Ignition temperature:

Decomposition temperature: Not determined.

Product is not selfigniting. · Auto igniting:

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

Not determined.

· Explosion limits:

Lower:

Not determined. Upper: 23 hPa · Vapor pressure at 20 °C: · Density at 20 °C: $1 g/cm^3$ Not determined. · Relative density

Not determined. · Vapor density Not determined. · Evaporation rate

· Solubility in / Miscibility with

Fully miscible. Water:

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Not determined. Dynamic: Kinematic: *Not determined.*

· 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:

To avoid thermal decomposition do not overheat.

No decomposition if used and stored according to specifications.

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Possibility of hazardous reactions

Reacts with strong acids.

Reacts with strong oxidizing agents.

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

Nitrogen oxides

Carbon monoxide and carbon dioxide

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:
- · 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 be specially treated adhering to official regulations.

Smaller quantities can be disposed of with household waste.

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

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- · Uncleaned packagings:
- · Recommendation:

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleansed are to be disposed of in the same manner as the product. Packaging can be reused or recycled after cleaning.

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

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

15 Regulatory information

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

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

77-86-1 trometamol

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.

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· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

· GHS label elements

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

· Hazard pictograms



· Signal word Warning

· Hazard statements

Causes serious eye irritation.

· Precautionary statements

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

Wash thoroughly after handling.

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.

· 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:

Bio-Rad Laboratories GmbH

Heidemannstrasse 164

D-80939 Munich

· Contact:

Technical Support:

E-Mail: cts-ce@bio-rad.com

· Abbreviations and acronyms:

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

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

* Data compared to the previous version altered.

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