

Printing date 01/20/2015 Reviewed on 01/20/2015

### 1 Identification

· Product identifier

· Trade name: Regeneration Buffer

· Catalog or product number: 9701172, 10040708

· CAS Number:

540-72-7

· EC number:

208-754-4

· Index number:

615-004-00-3

· Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the mixture Laboratory chemicals

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Bio-Rad Laboratories, Life Science Group

2000 Alfred Nobel Drive

Hercules, California 94547

(510)741-1000

· Information department:

Technical services, customer support

lsg\_techserv\_us@bio-rad.com

· Emergency telephone number:

1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.

510-741-1000

### 2 Hazard(s) identification

· Classification of the substance or mixture

Acute Tox. 3 H301 Toxic if swallowed.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R22: Harmful if swallowed.

R32: Contact with acids liberates very toxic gas.

- · Information concerning particular hazards for human and environment: not applicable
- Classification system:

The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.

- · Label elements
- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Danger

(Contd. on page 2)



Printing date 01/20/2015 Reviewed on 01/20/2015

Trade name: Regeneration Buffer

(Contd. of page 1)

· Hazard-determining components of labeling:

sodium thiocyanate

· Hazard statements

H301 Toxic if swallowed.

· Precautionary statements

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product. P301+P310 If swallowed: Immediately call a poison center/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information: Contact with acids may cause release of toxic gases

· Emergency overview:

· Routes of exposure: Ingestion

· Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.vPvB: Not applicable.

## 3 Composition/information on ingredients

· Chemical characterization: Substances

· CAS No. Description:

540-72-7 sodium thiocyanate

- · Identification number(s):
- EC number: 208-754-4
- · Index number: 615-004-00-3
- · Additional information: For the wording of the listed risk phrases refer to section 15.

### 4 First-aid measures

- · Description of first aid measures
- · General information

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

- · After inhalation Supply fresh air; 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 Immediately call a doctor.
- · Most important symptoms and effects, both acute and delayed Breathing difficulty
- · 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 or alcohol resistant foam.

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

(Contd. on page 3)



Printing date 01/20/2015 Reviewed on 01/20/2015

Trade name: Regeneration Buffer

(Contd. of page 2)

- · Advice for firefighters
- · Protective equipment: Mount respiratory protective device.

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective clothing.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Dispose contaminated material as waste according to item 13.
- · Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

- · Precautions for safe handling No special precautions are necessary if used correctly.
- · 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: According to product specification
- · Information about storage in one common storage facility: Do not store together with acids.
- · 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:

#### 540-72-7 sodium thiocyanate

PEL () 5 mg/m³ as CN: Skin

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

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- · Penetration time of glove material

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

(Contd. on page 4)



Printing date 01/20/2015 Reviewed on 01/20/2015

Trade name: Regeneration Buffer

· Eye protection: Safety glasses

(Contd. of page 3)

## 9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Solid
Color: Colorless
• Odor: Odorless

· Change in condition

Melting point/Melting range: 323 °C Boiling point/Boiling range: undetermined

· Flash point: Not applicable

· Flammability (solid, gaseous) Product is not flammable.

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

• **Density at 20 °C:** 1.73 g/cm<sup>3</sup>

· Solubility in / Miscibility with

Water: Fully miscible

Soluble 0.0 %

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Solids content: 100.0 %

• Other information No further relevant information available.

## 10 Stability and reactivity

Organic solvents:

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

## 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · Sensitization: No sensitizing effects known.

(Contd. on page 5)



Printing date 01/20/2015 Reviewed on 01/20/2015

Trade name: Regeneration Buffer

(Contd. of page 4)

- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

Substance is not listed.

NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

## 12 Ecological information

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

Water hazard class 1 (German Regulation) (Assessment by list): 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. Hand over to hazardous waste disposers.

- 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
- Void · DOT, ADR, ADN, IMDG, IATA
- · UN proper shipping name
- · DOT, ADR, ADN, IMDG, IATA Void

(Contd. on page 6)



Printing date 01/20/2015 Reviewed on 01/20/2015

Trade name: Regeneration Buffer

(Contd. of page 5)

- · Transport hazard class(es)
- · DOT, ADR, ADN, IMDG, IATA
- · Class Void
- Packing group
- · DOT, ADR, IMDG, IATA Void
- · Environmental hazards:
- · Marine pollutant:
- · 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":

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

Substance not listed.

· Section 313 (40CFR372.65):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· MAK (German Maximum Workplace Concentration)

Substance is not listed.

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

Substance is not listed.

- · National regulations
- · Water hazard class: Water hazard class 1 (Assessment by list): slightly hazardous for water.
- · 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)



Printing date 01/20/2015 Reviewed on 01/20/2015

Trade name: Regeneration Buffer

(Contd. of page 6)

- · Department issuing SDS: Environmental Health and Safety.
- Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- · Date of preparation / last revision 01/20/2015 / -
- · Abbreviations and acronyms:

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

Acute Tox. 3: Acute toxicity, Hazard Category 3

· \* Data compared to the previous version altered.

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