

Printing date 06/02/2015 Reviewed on 05/28/2015

## 1 Identification

- · Product identifier
- · Trade name: Variant Hemoglobinopathy Pgm Elution Buffer 2
- · Catalog or product number: 2700803
- · 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, Diagnostic Group

4000 Alfred Nobel Drive

Hercules, California 94547

1(510)724-7000

· Information department:

Technical services, customer support

TechsupportUSSD@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.

### 2 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description:

7732-18-5 water

- · Identification number(s):
- · EC number: 231-791-2
- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components:

7647-14-5 sodium chloride

1.0-2.5%

· Additional information For the wording of the listed risk phrases refer to section 15.

### 3 Hazard(s) identification

· Classification of the substance or mixture

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

- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void

### 4 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.

(Contd. on page 2)



Printing date 06/02/2015 Reviewed on 05/28/2015

Trade name: Variant Hemoglobinopathy Pgm Elution Buffer 2

· After swallowing Induce vomiting and call for medical help.

(Contd. of page 1)

## 5 Fire-fighting measures

- · 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.
- · Protective equipment: No special measures required.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: Dilute with plenty of 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.

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 No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · 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.
- · Components with limit values that require monitoring at the workplace:

#### 7647-01-0 hydrochloric acid

PEL (United States)	Short-term value: C 7 mg/m³, C 5 ppm
REL (United States)	Short-term value: C 7 mg/m³, C 5 ppm
TLV (United States)	Short-term value: C 2.98 mg/m³, C 2 ppm

## 26628-22-8 sodium azide

	Short-term value: C 0.3** mg/m³, C 0.1* ppm
	*as HN3 vapor; **as NaN3; Skin
TLV (United States)	Short-term value: C 0.29** mg/m³, C 0.11* ppm

\*as HN3 vapor \*\*as NaN3

(Contd. on page 3)



Printing date 06/02/2015 Reviewed on 05/28/2015

Trade name: Variant Hemoglobinopathy Pgm Elution Buffer 2

(Contd. of page 2)

- · 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: 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.

· Eye protection: Safety glasses

General Information Appearance: Form: Liquid Color: Colorless Odor: Odorless Odour threshold: Not determined.  pH-value at 20 °C: 6.2  Change in condition Melting point/Melting range: 100 °C Boiling point/Boiling range: 100 °C  Flash point: Not applicable Flammability (solid, gaseous) Not applicable.  Ignition temperature:  Decomposition temperature: Not determined.  Auto igniting: Product is not selfigniting.  Danger of explosion: Product does not present an explosion hazard.  Explosion limits: Lower: Not determined.  Vapor pressure at 20 °C: 23 hPa  Density: Not determined.  Vapour density Not determined.  Not determined.  Vapour density Not determined.  Solubility in / Miscibility with Water: Fully miscible	
Form: Color: Color: Colorless Odour threshold: Not determined.  DH-value at 20 °C: Change in condition Metting point/Melting range: Boiling point/Boiling range: 100 °C  Flash point: Not applicable Flammability (solid, gaseous) Not applicable.  Ignition temperature: Decomposition temperature: Not determined.  Auto igniting: Product is not selfigniting.  Danger of explosion: Product does not present an explosion hazard.  Explosion limits: Lower: Upper: Not determined. Vapor pressure at 20 °C: 23 hPa  Density: Relative density Not determined. Not determined. Not determined. Vapour density Not determined. Fully miscible	
Color: Odor: Odor: Odorless Odorless Odorless Odorless Odorless Odorless Odorless Odorless Not determined.  PH-value at 20 °C: Change in condition Melting point/Melting range: Boiling point/Boiling range: 100 °C Boiling point/Boiling range: Not applicable Flammability (solid, gaseous) Not applicable.  Ignition temperature: Decomposition temperature: Not determined. Auto igniting: Product is not selfigniting.  Danger of explosion: Product does not present an explosion hazard.  Explosion limits: Lower: Upper: Not determined. Vapor pressure at 20 °C: 23 hPa  Density: Relative density Not determined. Not determined. Not determined. Vapour density Not determined. Fully miscible	
Odor: Odour threshold: Odour threshold: Not determined.  PH-value at 20 °C: Change in condition Melting point/Melting range: Boiling point/Boiling range: 100 °C Flash point: Not applicable Flammability (solid, gaseous) Not applicable.  Ignition temperature: Decomposition temperature: Not determined.  Auto igniting: Product is not selfigniting.  Danger of explosion: Product does not present an explosion hazard.  Explosion limits: Lower: Upper: Not determined. Vapor pressure at 20 °C: 23 hPa  Density: Relative density Not determined. Fully miscible	
Odour threshold:  pH-value at 20 °C:  6.2  Change in condition Melting point/Melting range: Boiling point/Boiling range: 100 °C  Flash point:  Not applicable  Flammability (solid, gaseous)  Ignition temperature:  Decomposition temperature:  Not determined.  Auto igniting:  Product is not selfigniting.  Danger of explosion:  Explosion limits:  Lower: Upper:  Not determined.  Vapor pressure at 20 °C: 23 hPa  Density:  Not determined.  Not determined.  Not determined.  Not determined.  Vapour density Not determined.  Fully miscible	
Change in condition Melting point/Melting range: Boiling point/Boiling range: 100 °C Flash point: Not applicable Flammability (solid, gaseous) Not applicable.  Ignition temperature: Decomposition temperature: Not determined. Auto igniting: Product is not selfigniting.  Danger of explosion: Product does not present an explosion hazard.  Explosion limits: Lower: Not determined. Vapor pressure at 20 °C: 23 hPa  Density: Relative density Not determined. Fully miscible	
Melting point/Melting range: Boiling point/Boiling range: 100 °C 1100 °C  Not applicable  Not applicable  Flammability (solid, gaseous) Not applicable.  Ignition temperature:  Decomposition temperature:  Not determined.  Auto igniting:  Product is not selfigniting.  Product does not present an explosion hazard.  Explosion limits:  Lower: Upper: Not determined.  Vapor pressure at 20 °C: 23 hPa  Density: Not determined Not determined.  Vapour density Not determined.  Vapour density Not determined.  Fully miscible	
Boiling point/Boiling range: 100 °C  Flash point: Not applicable  Flammability (solid, gaseous) Not applicable.  Ignition temperature:  Decomposition temperature: Not determined.  Auto igniting: Product is not selfigniting.  Danger of explosion: Product does not present an explosion hazard.  Explosion limits:  Lower: Not determined.  Upper: Not determined.  Vapor pressure at 20 °C: 23 hPa  Density: Not determined.  Relative density Not determined.  Vapour density Not determined.  Vapour density Not determined.  Solubility in / Miscibility with Water: Fully miscible	
Flash point:  Flammability (solid, gaseous)  Not applicable.  Ignition temperature:  Decomposition temperature:  Not determined.  Auto igniting:  Product is not selfigniting.  Product does not present an explosion hazard.  Explosion limits:  Lower:  Not determined.  Upper:  Not determined.  Vapor pressure at 20 °C:  23 hPa  Density:  Not determined.  Solubility in / Miscibility with  Water:  Fully miscible	
Flammability (solid, gaseous)  Ignition temperature:  Decomposition temperature:  Not determined.  Auto igniting:  Product is not selfigniting.  Product does not present an explosion hazard.  Explosion limits:  Lower:  Upper:  Not determined.  Vapor pressure at 20 °C:  23 hPa  Density:  Relative density  Vapour density  Vapour density  Evaporation rate  Solubility in / Miscibility with  Water:  Fully miscible	
Ignition temperature:  Decomposition temperature:  Not determined.  Product is not selfigniting.  Product does not present an explosion hazard.  Explosion limits:  Lower:  Upper:  Not determined.  Vapor pressure at 20 °C:  23 hPa  Density:  Relative density  Vapour density  Evaporation rate  Not determined.  Not determined.  Not determined  Not determined.  Fully miscible	
Decomposition temperature:  Not determined.  Product is not selfigniting.  Product does not present an explosion hazard.  Explosion limits: Lower: Lower: Not determined. Upper: Not determined.  Vapor pressure at 20 °C: 23 hPa  Density: Not determined Relative density Not determined. Solubility in / Miscibility with Water: Fully miscible	
Auto igniting:  Product is not selfigniting.  Product does not present an explosion hazard.  Explosion limits:  Lower:  Not determined.  Vapor pressure at 20 °C:  Possity:  Not determined  Not determined  Not determined  Not determined  Not determined.  Solubility in / Miscibility with  Water:  Fully miscible	
Danger of explosion:  Explosion limits:  Lower:  Upper:  Not determined.  Vapor pressure at 20 °C:  Density:  Relative density  Vapour density  Evaporation rate  Solubility in / Miscibility with  Water:  Product does not present an explosion hazard.  Not determined.  Not determined.  Not determined.  Not determined.  Not determined.  Fully miscible	
Explosion limits:  Lower: Not determined. Upper: Not determined.  Vapor pressure at 20 °C: 23 hPa  Density: Not determined Relative density Not determined. Vapour density Not determined. Evaporation rate Not determined.  Solubility in / Miscibility with Water: Fully miscible	
Lower: Not determined. Upper: Not determined.  Vapor pressure at 20 °C: 23 hPa  Density: Not determined Relative density Not determined. Vapour density Not determined. Evaporation rate Not determined.  Solubility in / Miscibility with Water: Fully miscible	
Upper: Not determined.  Vapor pressure at 20 °C: 23 hPa  Density: Not determined Relative density Not determined.  Vapour density Not determined.  Evaporation rate Not determined.  Solubility in / Miscibility with Water: Fully miscible	
Vapor pressure at 20 °C:  Density: Relative density Not determined. Vapour density Not determined. Evaporation rate Not determined. Not determined. Not determined. Fully miscible	
Density: Relative density Not determined. Vapour density Not determined. Evaporation rate Not determined. Not determined. Fully miscible	
Relative density Not determined. Vapour density Not determined. Evaporation rate Not determined. Solubility in / Miscibility with Water: Fully miscible	
Relative density Not determined. Vapour density Not determined. Evaporation rate Not determined. Solubility in / Miscibility with Water: Fully miscible	
Vapour density       Not determined.         Evaporation rate       Not determined.         Solubility in / Miscibility with       Fully miscible	
Evaporation rate  Not determined.  Solubility in / Miscibility with  Water:  Fully miscible	
Water: Fully miscible	
Partition coefficient (n-octanol/water): Not determined.	
Viscosity:	
dynamic: Not determined.  kinematic: Not determined.	

(Contd. on page 4)



## Safety Data Sheet

Printing date 06/02/2015 Reviewed on 05/28/2015

Trade name: Variant Hemoglobinopathy Pgm Elution Buffer 2

(Contd. of page 3)

· Solvent content:

Organic solvents: 0.0 % Water: 98.5 %

· Other information No further relevant information available.

## 10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Incompatible materials:

This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of lead azide and copper azide.

· Hazardous decomposition products: No dangerous decomposition products known

## 11 Toxicological information

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

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

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)

7647-01-0 hydrochloric acid

3

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Target organs: Not applicable.

### 12 Ecological information

- · 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.
- Additional ecological information:
- · General notes: Generally not hazardous for water.

DU



Printing date 06/02/2015 Reviewed on 05/28/2015

Trade name: Variant Hemoglobinopathy Pgm Elution Buffer 2

(Contd. of page 4)

## 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Hand over to hazardous waste disposers.

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

Dispose of waste in accordance to applicable national, regional, or local regulations.

Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems.

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

4 Transport information	
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA · Class	Void
· Packing group · DOT, ADR, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of M and the IBC Code	IARPOL73/78 Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.

## 15 Regulatory information

· SARA (Superfund Amendents and Reauthorization Act of 1986 - USA)

	02/304 (40CFR355.30 / 40CFR355.40):	
7647-01-0	hydrochloric acid	
26628-22-8	sodium azide	
· Section 31	13 (40CFR372.65):	
	hydrochloric acid	
26628-22-8	sodium azide	
· TSCA (Toxi	· TSCA (Toxic Substances Control Act):	
All ingredier	All ingredients are listed.	

(Contd. on page 6)



Printing date 06/02/2015 Reviewed on 05/28/2015

Trade name: Variant Hemoglobinopathy Pgm Elution Buffer 2

(Contd. of page 5)

- · National regulations
- · Water hazard class: Generally not hazardous for water.

## 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: 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 06/02/2015 / -
- · 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

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)

\* \* Data compared to the previous version altered.

DUS