Material Safety Data Sheet

Printing date 04/05/2010 Reviewed on 11/13/2009

1 Identification of substance:

· **Product details:**

· **Trade name:** **Variant Hemoglobin A1c Buffer 2**

· **Catalog or product number:** 196-1123
· **Application of the substance / the preparation** In-vitro laboratory reagent or component

· **Manufacturer/Supplier:**
Bio-Rad Laboratories, Diagnostic Group
4000 Alfred Nobel Drive
Hercules, California 94547 1(510)724-7000

· **Information department:** Technical services, customer support.
· **Emergency information:**
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 components:

· **Chemical characterization:**
· **CAS No. Description:**
7732-18-5 water
· **Identification number(s):**
· **EINECS Number:** 231-791-2
· **Additional information:** For the wording of the listed risk phrases refer to section 15.

· **Chemical characterization**

· **Listing of dangerous and non-hazardous components:**			
10049-21-5	Sodium Phosphate Monobasic, Monohydrate	Xi; R 36/37/38	2.5-5%

3 Hazards identification

· **Emergency overview:** not applicable
· **Information pertaining to particular dangers for man 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.
· **NFPA ratings (scale 0-4)**
Health = 0
Fire = 0
Reactivity = 0

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.
· **After swallowing** Induce vomiting and call for medical help.

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5 Fire fighting measures

· **Suitable extinguishing agents**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Protective equipment:** No special measures required.

6 Accidental release measures

· **Person-related safety precautions:** Handle as potentially infectious.
· **Measures for environmental protection:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
· **Additional information:** No dangerous substances are released.

7 Handling and storage

· **Handling**
· **Information for safe handling:**
No special measures required.
No special precautions are necessary if used correctly.
· **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.

8 Exposure controls and 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:**	
26628-22-8 sodium azide	
REL (United States)	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

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment**
· **General protective and hygienic measures** The usual precautionary measures for handling chemicals should be followed.
· **Breathing equipment:** Not required.
· **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
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
Protective gloves.

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· ***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.
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.
· ***For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:***
Synthetic gloves
· ***For the permanent contact gloves made of the following materials are suitable:*** *Synthetic gloves*
· ***For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:***
Synthetic gloves
· ***As protection from splashes gloves made of the following materials are suitable:*** *Synthetic gloves*
· ***Not suitable are gloves made of the following materials:*** *Synthetic gloves*
· ***Eye protection:*** *Safety glasses*

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9 Physical and chemical properties:

· **General Information**	
Form:	liquid
Color:	Colorless
Odor:	Odorless
· **Change in condition**	
Melting point/Melting range:	0°C
Boiling point/Boiling range:	100°C
· **Flash point:**	Not applicable
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Vapor pressure at 20°C:**	23 hPa
· **Density at 20°C:**	1 g/cm³
· **Solubility in / Miscibility with**	
Water:	Fully miscible
Organic solvents:	0.0 %
Water:	95.9 %
Solids content:	4.1 %

10 Stability and reactivity

· ***Thermal decomposition / conditions to be avoided:*** *No decomposition if used according to specifications.*
· ***Materials to be avoided:***
· ***Dangerous reactions***
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.
· ***Dangerous products of decomposition:*** *No dangerous decomposition products known*

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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:**
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.
The substance is not subject to classification according to the latest version of the EU lists.
· **Target organs:** Not applicable.

12 Ecological information:

· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (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.

13 Disposal considerations

· **Product:**
· **Recommendation**
Hand over to hazardous waste disposers.
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.

14 Transport information

· **DOT regulations:**
· **Hazard class:** -

· **Land transport ADR/RID (cross-border)**
· **ADR/RID class:** -

· **Maritime transport IMDG:**
· **IMDG Class:** -
· **Marine pollutant:** No

· **Air transport ICAO-TI and IATA-DGR:**
· **ICAO/IATA Class:** -

· **Transport/Additional information:** Not dangerous according to the above specifications.

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15 Regulations

· **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):**

7732-18-5	water
7558-79-4	disodium hydrogenorthophosphate
26628-22-8	sodium azide

· **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.

· **Markings according to EU guidelines:**
Observe the general safety regulations when handling chemicals
The substance is not subject to classification according to EU lists and other sources of literature known to us.
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (GefStoffV).

· **National regulations**

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly 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 MSDS:** 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
· *** Data compared to the previous version altered.**