

### 06/03/2015

### **Kit Components**

Product code	Description
270-2415	Variant II Turbo A1c Reorder Pack
	V II Turbo A1c Reorder Pack 1600 Test
270-2417	



Printing date 06/03/2015 Reviewed on 05/26/2015

### 1 Identification

- · Product identifier
- · Trade name: Variant II Turbo A1c Elution Buffer A
- · Catalog or product number: 2702401
- · 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: Void
- · 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
- · Classification system
- · 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.

(Contd. on page 2)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Elution Buffer A

(Contd. of page 1)

- · 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 Rinse mouth with water. Seek medical attention and appropriate follow-up.

### 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



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Elution Buffer A

(Contd. of page 2)

- · Breathing equipment: Not required.
- · Protection of hands: Protective gloves.
- · 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
- · Eye protection: Safety glasses
- · Body protection: Protective work clothing.

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· General Information		
· Appearance:		
Form:	Liquid	
Color:	Colorless	
· Odor:	Odorless	
· Odour threshold:	Not determined.	
· pH-value at 20 °C:	5 - 7	
· Change in condition		
Melting point/Melting range:	0 °C	
Boiling point/Boiling range:	100 °C	
· Flash point:	Not applicable	



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Elution Buffer A

(Contd. of page 3)

	· · · · · · · · · · · · · · · · · · ·	Contd. of page 3
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with	h	
Water:	Fully miscible	
· Partition coefficient (n-octar	nol/water): Not determined.	
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.0 %	
Water:	99.1 %	
Solids content:	0.9 %	
· 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)

None of the ingredients is listed.

· 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.



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Elution Buffer A

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### 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.

### 13 Disposal considerations

- · Waste treatment methods
- Recommendation

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.

N-Number	
n-number OT, ADR, ADN, IMDG, IATA	Void
IN 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 MA	ARPOL73/78
and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	-

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Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Elution Buffer A

(Contd. of page 5)

### 15 Regulatory information

- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

26628-22-8 sodium azide

Section 313 (40CFR372.65):

26628-22-8 sodium azide

· TSCA (Toxic Substances Control Act):

7558-79-4 disodium hydrogenorthophosphate

6976-37-0 Bis(2-hydroxyethyl)amino-tris(hydroxymethyl)methane

26628-22-8 sodium azide

7732-18-5 water

- · 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 06/03/2015 / -
- · Abbreviations and acronvms:

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)

NFPA: National Fire Protection Association (USA)

· \* Data compared to the previous version altered.

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Printing date 06/03/2015 Reviewed on 05/26/2015

### 1 Identification

- · Product identifier
- · Trade name: Variant II Turbo A1c Elution Buffer B
- · Catalog or product number: 2702402
- · 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: Void
- · 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
- · Classification system
- · NFPA ratings (scale 0-4)

Health = 0

Fire = 0

Reactivity = 0

### 4 First-aid measures

· General information

Seek immediate medical advice.

(Contd. on page 2)



### Safety Data Sheet

Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Elution Buffer B

(Contd. of page 1)

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 Rinse mouth with water. Seek medical attention and appropriate follow-up.

### 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:



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Elution Buffer B

(Contd. of page 2)

- · 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.

· 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
- · Eye protection: Safety glasses

Physical and chemical prope		
General Information Appearance:		
Form:	Liquid	
Color:	Colorless	
Odor:	Odorless	
Odour threshold:	Not determined.	
pH-value at 20 °C:	5-7	
Change in condition		
Melting point/Melting range:	0 °C	
Boiling point/Boiling range:	undetermined	
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.	
Evaporation rate	Not determined.	

(Contd. on page 4)



### Safety Data Sheet

Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Elution Buffer B

(Contd. of page 3)

· Solubility in / Miscibility with

Water: Fully miscible

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

· Viscosity:

dynamic: Not determined. kinematic: Not determined.

· 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)

None of the ingredients is listed.

· 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.

(Contd. on page 5)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Elution Buffer B

(Contd. of page 4)

- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential 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.

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 MAI and the IBC Code	RPOL73/78 Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-

### 15 Regulatory information

- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

26628-22-8 sodium azide

· Section 313 (40CFR372.65):

26628-22-8 sodium azide

(Contd. on page 6)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Elution Buffer B

(Contd. of page 5)

	(Conta. or page 3)
· TSCA (Toxi	ic Substances Control Act):
7558-79-4	disodium hydrogenorthophosphate
6976-37-0	Bis(2-hydroxyethyl)amino-tris(hydroxymethyl)methane
26628-22-8	sodium azide
7732-18-5	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 06/03/2015 / -
- · 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)

NFPA: National Fire Protection Association (USA)

· \* Data compared to the previous version altered.

DUS .



Printing date 06/03/2015 Reviewed on 05/26/2015

### 1 Identification

- · Product identifier
- · Trade name: Variant II Turbo Analytical Cartridge
- · Catalog or product number: 2702411
- · 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:

Polymerized Poly(glycidylmethacrylate-co-diethylene-glycol dimethacrylate)

- Identification number(s):
- Index number: 585-580-04-X
- · Chemical characterization: Mixtures
- · **Description**: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components:

7732-18-5 water

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

Health = 0

Fire = 0

Reactivity = 0

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Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo Analytical Cartridge

(Contd. of page 1)

### 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 Seek immediate medical advice.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.

### 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: No special measures required.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · 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:
- 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.
- · Protection of hands: Protective gloves.

(Contd. on page 3)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo Analytical Cartridge

(Contd. of page 2)

- · 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.

· 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
- · Eye protection: Safety glasses
- · Body protection: Protective work clothing.

General Information		
Appearance:		
Form:	particulate	
Color:	White	
Odor:	Odorless	
Odour threshold:	Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	undetermined	
Boiling point/Boiling range:	999 ℃	
Flash point:	Not applicable	
Flammability (solid, gaseous)	Not determined.	
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:	Not applicable.	
Density:	Not determined	
Relative density	Not determined.	
Vapour density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Fully miscible	

(Contd. on page 4)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo Analytical Cartridge

(Contd. of page 3)

· Viscosity: dynamic: kinematic:	Not applicable. Not applicable.
· Solvent content:	
Organic solvents:	0.0 %
Water:	2.0 %
Solids content:	98.0 %
· 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: No further relevant information available.
- · 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)

None of the ingredients is listed.

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.

(Contd. on page 5)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo Analytical Cartridge

(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 06/03/2015 / -
- · 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)

NFPA: National Fire Protection Association (USA)

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

DUS.



Printing date 06/03/2015 Reviewed on 05/26/2015

### 1 Identification

- · Product identifier
- · Trade name: Variant II Turbo Guard Cartridge
- · Catalog or product number: 270-2412
- · 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:

Polymerized Poly(glycidylmethacrylate-co-diethylene-glycol dimethacrylate)

- Identification number(s):
- Index number: 585-580-04-X
- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components:

7732-18-5 water

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



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo Guard Cartridge

(Contd. of page 1)

· After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.

### 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: No special measures required.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · 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:

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.
- · 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 3)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo Guard Cartridge

(Contd. of page 3)

### 10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Incompatible materials: No further relevant information available.
- · 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)

None of the ingredients is listed.

· 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.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

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.

(Contd. on page 5)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo Guard Cartridge

(Contd. of page 4)

- Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

IN-Number	
DOT, ADR, ADN, IMDG, IATA	Void
JN 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 MA	ARPOL73/78
and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	-

### 15 Regulatory information

- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

· Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

7732-18-5 water

- · 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.

(Contd. on page 6)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo Guard Cartridge

(Contd. of page 5)

· 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 06/03/2015 / -
- 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.

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Printing date 06/03/2015 Reviewed on 05/26/2015

### 1 Identification

- · Product identifier
- · Trade name: Variant II Turbo A1c Calibrator 1
- · Catalog or product number: 2702405
- · 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: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.

· Listing of	dangerous and	non-hazardous	components:
--------------	---------------	---------------	-------------

	Human Whole Blood	50-100%
57-50-1	sucrose, pure	10-20%
7732-18-5	water	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
- · Classification system
- · NFPA ratings (scale 0-4)

Health = 0

Fire = 0

Reactivity = 0

· Special Hazards Contains human sourced and/or potentially infectious components.

#### 4 First-aid measures

- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.

(Contd. on page 2)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Calibrator 1

(Contd. of page 1)

- · 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 Rinse mouth with water. Seek medical attention and appropriate follow-up.

### 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: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · 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.
- · 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:

### 57-50-1 sucrose, pure

PEL (United States) 15\* 5\*\* mg/m<sup>3</sup>

\*total dust \*\*respirable fraction

REL (United States) 10\* 5\*\* mg/m³

\*total dust \*\*respirable fraction

TLV (United States) 10 mg/m<sup>3</sup>

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

(Contd. on page 3)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Calibrator 1

(Contd. of page 2)

- · Personal protective equipment
- · General protective and hygienic measures

Follow the usual biosafety practices for handling potentially infectious materials.

- · 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.

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
- · Eye protection: Safety glasses
- · Body protection: Protective work clothing.

9 Physical and chemical proper	ties
· General Information · Appearance:	
Form:	Solid
Color:	Red
· Odor:	Odorless
· Odour threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition Melting point/Melting range: Boiling point/Boiling range:	undetermined undetermined
· Flash point:	Not applicable
· Flammability (solid, gaseous)	Not determined.
· 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:	Not applicable.
· Density:	Not determined
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.

(Contd. on page 4)



### Safety Data Sheet

Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Calibrator 1

(Contd. of page 3)

· Solubility in / Miscibility with

Water: Fully miscible

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

· Viscosity:

dynamic: Not applicable. kinematic: Not applicable.

· Solvent content:

 Organic solvents:
 0.0 %

 Water:
 1.0 %

 Solids content:
 99.0 %

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: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

### 11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eve: 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)

None of the ingredients is listed.

· 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.

(Contd. on page 5)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Calibrator 1

(Contd. of page 4)

- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- 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

- · Waste treatment methods
- · Recommendation

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.

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

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
	VOIC
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.	ARPOL73/78
and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	-

### 15 Regulatory information

- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

(Contd. on page 6)



Printing date 06/03/2015



Printing date 06/03/2015 Reviewed on 05/26/2015

### 1 Identification

- · Product identifier
- · Trade name: Variant II Turbo A1c Calibrator 2
- · Catalog or product number: 2702406
- · 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: Mixtures
- · **Description**: Mixture of the substances listed below with non-hazardous additions.

<ul> <li>Listing of</li> </ul>	dangerous a	nd non-hazar	dous com	ponents:
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	Human Whole Blood	50-100%
57-50-1	sucrose, pure	10-20%
7732-18-5	water	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
- · Classification system

.



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Calibrator 2

(Contd. of page 1)

- · 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 Rinse mouth with water. Seek medical attention and appropriate follow-up.

### 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: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · 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.
- · 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:

### 57-50-1 sucrose, pure

PEL (United States) 15\* 5\*\* mg/m<sup>3</sup>

\*total dust \*\*respirable fraction

REL (United States) 10\* 5\*\* mg/m³

\*total dust \*\*respirable fraction

TLV (United States) 10 mg/m<sup>3</sup>

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

(Contd. on page 3)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Calibrator 2

(Contd. of page 2)

- · Personal protective equipment
- · General protective and hygienic measures

Follow the usual biosafety practices for handling potentially infectious materials.

- · 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.

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
- · Eye protection: Safety glasses
- · Body protection: Protective work clothing.

General Information		
Appearance:	0.111	
Form: Color:	Solid	
Odor:	Red Odorless	
Odour threshold:	Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	undetermined	
Boiling point/Boiling range:	undetermined	
Flash point:	Not applicable	
Flammability (solid, gaseous)	Not determined.	
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:	Not applicable.	
Density:	Not determined	
Relative density	Not determined.	
Vapour density	Not applicable.	
Evaporation rate	Not applicable.	



### Safety Data Sheet

Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Calibrator 2

(Contd. of page 3)

· Solubility in / Miscibility with

Water: Fully miscible

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

· Viscosity:

dynamic: Not applicable. kinematic: Not applicable.

· Solvent content:

 Organic solvents:
 0.0 %

 Water:
 1.0 %

 Solids content:
 99.0 %

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: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

### 11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eve: 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)

None of the ingredients is listed.

· 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.

(Contd. on page 5)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Calibrator 2

(Contd. of page 4)

- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- 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

- · Waste treatment methods
- · Recommendation

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.

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

JN-Number	
DOT, ADR, ADN, IMDG, IATA	Void
JN proper shipping name DOT, ADR, ADN, IMDG, IATA	Void
Fransport 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.
Fransport in bulk according to Annex II of MA and the IBC Code	ARPOL73/78 Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	_

### 15 Regulatory information

- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

(Contd. on page 6)



Printing date 06/03/2015 Reviewed on 05/26/2015

Trade name: Variant II Turbo A1c Calibrator 2

(Contd. of page 5)

•	Section	313	(40CFR372.65)	:
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None of the ingredients is listed.

#### · TSCA (Toxic Substances Control Act):

57-50-1 sucrose, pure

7732-18-5 water

#### · California Proposition 65:

#### · Developmental Toxicity

32986-56-4 tobramycin

1405-41-0 Gentamicin Sulfate

- · 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 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 06/03/2015 / -
- 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 (divis



Printing date 06/03/2015 Reviewed on 05/12/2015

### 1 Identification

- Product identifier
- · Trade name: Calibrator Diluent
- · Catalog or product number: 220-0119
- · 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: Void
- · 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
- · Classification system
- · 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.

(Contd. on page 2)



Printing date 06/03/2015 Reviewed on 05/12/2015

Trade name: Calibrator Diluent

(Contd. of page 1)

- · 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 Rinse mouth with water. Seek medical attention and appropriate follow-up.

### 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:

#### 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.

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Trade name: Calibrator Diluent

(Contd. of page 2)

- · 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.

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
- · Eye protection: Safety glasses
- · Body protection: Protective work clothing.

General Information		
Appearance:		
Form:	Liquid	
Color:	Colorless	
Odor:	Odorless	
Odour threshold:	Not determined.	
pH-value at 20 °C:	5-10	
Change in condition		
Melting point/Melting range:	0 ℃	
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 at 20 °C:	1.00005 g/cm³	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible	

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Trade name: Calibrator Diluent

(Contd. of page 3)

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

· Viscosity:

dynamic: Not determined. kinematic: Not determined.

· Solvent content:

Organic solvents: 0.0 % Water: 100.0 %

· Other information



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Trade name: Calibrator Diluent

(Contd. of page 4)

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

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

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.

UN-Number DOT, ADR, ADN, IMDG, IATA	Void
IN proper shipping name OOT, ADR, ADN, IMDG, IATA	Void
ransport 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 MA and the IBC Code	ARPOL73/78 Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	-

### 15 Regulatory information

- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

26628-22-8 sodium azide

· Section 313 (40CFR372.65):

26628-22-8 sodium azide

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Trade name: Calibrator Diluent

(Contd. of page 5)

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · 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 06/03/2015 / -
- · 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)

NFPA: National Fire Protection Association (USA)

\* Data compared to the previous version altered.

DUS



Printing date 06/03/2015 Reviewed on 05/26/2015

### 1 Identification

- · Product identifier
- · Trade name: Whole Blood Primer
- · Catalog or product number: 270-0351, 270-0352
- · 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: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components:

Human Whole Blood	50-100%	
80-68-2 DL-threonine	20-35%	

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

Health = 0

Fire = 0

Reactivity = 0

· Special Hazards Contains human sourced and/or potentially infectious components.

### 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.

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Trade name: Whole Blood Primer

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- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.

### 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: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · 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:

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

Follow the usual biosafety practices for handling potentially infectious materials.

- · 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.

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Trade name: Whole Blood Primer

(Contd. of page 2)

• For the permanent contact in work areas without heighten ed 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
- · Eye protection: Safety glasses
- · Body protection: Protective work clothing.

9 Physical and chemical properties	
<ul> <li>General Information</li> <li>Appearance:     Form:     Color:     Odor:     Odour threshold:</li> </ul>	Solid Red Odorless Not determined.
· pH-value:	Not applicable.
Change in condition     Melting point/Melting range:     Boiling point/Boiling range:	undetermined undetermined
· Flash point:	Not applicable
· Flammability (solid, gaseous)	Not determined.
· 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. Not determined.
· Vapor pressure:	Not applicable.
<ul><li>Density:</li><li>Relative density</li><li>Vapour density</li><li>Evaporation rate</li></ul>	Not determined Not determined. Not applicable. Not applicable.
Solubility in / Miscibility with Water:	Fully miscible
· Partition coefficient (n-octanol/water):	Not determined.
Viscosity:     dynamic:     kinematic:	Not applicable. Not applicable.

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Trade name: Whole Blood Primer

(Contd. of page 3)

· Solvent content:

Organic solvents:0.0 %Water:1.0 %

Solids content: 66.5 %

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: No further relevant information available.
- · 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)

None of the ingredients is listed.

· 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:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

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Trade name: Whole Blood Primer

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Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

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.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 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 MARPOL73/ and the IBC Code	<b>78</b> Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-

### 15 Regulatory information

- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

· Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

80-68-2 DL-threonine

7647-14-5 sodium chloride

(Contd. on page 6)



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Trade name: Whole Blood Primer

(Contd. of page 5)

7732-18-5 water

- · California Proposition 65:
- Developmental Toxicity

32986-56-4 tobramycin

1405-41-0 Gentamicin Sulfate

- · 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.

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