

06/03/2015

Kit Components

Product code	Description
425-2180 425-2200	Anti-Prothrombin IgG, IgM
Components:	
425-2002	Calibrators 1,2,3 aCL, aB2PI, aPS, aPT
425-2005	Positive Control/Negative Control
425-2187	Conjugate
425-2188	Sample Diluent
425-2009	Substrate
425-2069	Wash Concentrate
425-2010	Stop Solution



Printing date 06/03/2015 Reviewed on 06/02/2015

1 Identification

- Product identifier
- · Trade name: Calibrators 1,2,3
- · Catalog or product number:

425-2002, 425-2022, 425-2042, 425-2003, 425-2023, 425-2043, 425-2004, 425-2024, 425-2044, 425-2062, 425-2063, 425-2064, 425-2082, 425-2083, 425-2102, 425-2103, 425-2104, 425-2122, 425-2123, 425-2124, 425-2142, 425-2143, 425-2164, 425-2163, 425-2164, 425-2182, 425-2183, 425-2184, 425-2202, 425-2203, 425-2204

- · 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:

Human Source Material

- · Identification number(s):
- · EC number: 268-338-3
- · Additional information: Contains human sourced and/or potentially infectious components.
- · Chemical characterization: Mixtures
- · **Description**: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components:

26628-22-8 sodium azide

0.01-0.1%

· 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
- · Emergency overview:
- · Routes of exposure: Ingestion

(Contd. on page 2)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Calibrators 1,2,3

(Contd. of page 1)

- · 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

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

- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Immediately call a doctor.

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.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Disinfectant

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

Dispose contaminated material as waste according to item 13.

· Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling 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.

(Contd. on page 3)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Calibrators 1,2,3

(Contd. of page 2)

- · 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

Follow the usual biosafety practices for handling potentially infectious materials.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

- · 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.

· Eve protection: Safety glasses

· Auto igniting:

· Body protection: Protective work clothing.

9 Physica		

General Information Appearance: Form: Color: Odor:	Liquid Opaque Odorless Not determined.	
· Odour threshold:	1100 0000000000000000000000000000000000	
· pH-value:	Not determined.	
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	undetermined undetermined	
· Flash point:	Not applicable	
· Flammability (solid, gaseous)	Not applicable.	
· Ignition temperature:		
Decomposition temperature:	Not determined.	

Product is not selfigniting.

(Contd. on page 4)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Calibrators 1,2,3

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		(Contd. of page
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure:	Not determined.	
· Density:	Not determined	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible	
· Partition coefficient (n-octano	I/water): Not determined.	
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.0 %	
Solids content:	0.1 %	
· 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 shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

(Contd. on page 5)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Calibrators 1,2,3

(Contd. of page 4)

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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.

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

Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

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.

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	
		(Contd. on page 6)

(Contd. on page 6)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Calibrators 1,2,3

(Contd. of page 5)

· Special precautions for user

Not applicable.

· Transport in bulk according to Annex II of MARPOL73/78

and the IBC Code Not applicable.

UN "Model Regulation":

15 Regulatory information

- · 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):

26628-22-8 sodium azide

- · 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 (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 06/02/2015

1 Identification

- · Product identifier
- · Trade name: Positive Control/Negative Control
- · Catalog or product number:

425-2005, 425-2025, 425-2045, 425-2006, 425-2026, 425-2046, 425-2065, 425-2066, 425-2085, 425-2086, 425-2105, 425-2106, 425-2125, 425-2126, 425-2145, 425-2146, 425-2166, 425-2165, 425-2185, 425-2186, 425-2205, 425-2206

- · 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:

Human Source Material

- · Identification number(s):
- · **EC** number: 268-338-3
- · Additional information: Contains human sourced and/or potentially infectious components.
- · Chemical characterization: Mixtures
- · **Description**: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components:

26628-22-8 sodium azide

0.01-0.1%

· 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
- · Emergency overview:
- · Routes of exposure: Ingestion

(Contd. on page 2)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Positive Control/Negative Control

(Contd. of page 1)

- · 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

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

- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Immediately call a doctor.

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.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Disinfectant

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

Dispose contaminated material as waste according to item 13.

· Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling 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.

(Contd. on page 3)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Positive Control/Negative Control

(Contd. of page 2)

- · 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

Follow the usual biosafety practices for handling potentially infectious materials.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

- · 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.

· Eve protection: Safety glasses

· Auto igniting:

· Body protection: Protective work clothing.

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 General Information Appearance: Form: Color: Odor: 	Liquid Opaque Odorless
· Odour threshold:	Not determined.
· pH-value:	Not determined.
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	undetermined undetermined
· Flash point:	Not applicable
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	
Decomposition temperature:	Not determined.

Product is not selfigniting.

(Contd. on page 4)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Positive Control/Negative Control

		(Contd. of page
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure:	Not determined.	
· Density:	Not determined	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible	
· Partition coefficient (n-octanol/w	ater): Not determined.	
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.0 %	
Solids content:	0.1 %	
· 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 shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

(Contd. on page 5)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Positive Control/Negative Control

(Contd. of page 4)

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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.

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

Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

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.

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	
		(Contd. on page 6)

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Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Positive Control/Negative Control

(Contd. of page 5)

· Special precautions for user

Not applicable.

Transport in bulk according to Annex II of MARPOL73/78

and the IBC Code

Not applicable.

· UN "Model Regulation":

15 Regulatory information

- · 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):

26628-22-8 sodium azide

- · 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 (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: Conjugate
- · Catalog or product number: 425-2187, 425-2207
- · 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:
--

Stabilzyme Select HRP Conjugate Stabilizer	L
(Proprietary aqueous, protein-containing mixture preserved with 0.02% methylisothiazolone, 0.02%	l
bromonitrodioxane, and 20 ppm Proclin 300)	l

7732-18-5 water

35-50%

35-50%

· 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: Conjugate

(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 Induce vomiting and call for medical help.

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.

Do not allow to enter sewers/ surface or ground 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:

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

(Contd. on page 3)



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

Trade name: Conjugate

(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:	Liquid
Color:	Blue
Odor:	Odorless
Odour threshold:	Not determined.
pH-value at 20 °C:	7
Change in condition	
Melting point/Melting range:	undetermined
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.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible

(Contd. on page 4)



Safety Data Sheet

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

Trade name: Conjugate

(Contd. of page 3)

· Viscosity:

dynamic: Not determined. kinematic: Not determined.

· Solvent content:

Organic solvents: 0.0 % Water: 50.0 %

· 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.
- · Additional ecological information:
- General notes:

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

(Contd. on page 5)



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

Trade name: Conjugate

(Contd. of page 4)

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

JN-Number	
OT, ADR, ADN, IMDG, IATA	Void
IN proper shipping name OOT, 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 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

(Contd. on page 6)



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

Trade name: Conjugate

(Contd. of page 5)

- · 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 (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 06/02/2015

1 Identification

- · Product identifier
- · Trade name: Sample Diluent
- · Catalog or product number: 425-2188
- · 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
- · Additional information: Contains added constituents of animal origin.
- · Chemical characterization: Mixtures
- · **Description**: Mixture of the substances listed below with non-hazardous additions.

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

Library of daily of daily from the factor of	
9048-46-8 Bovine Serum Albumin	1.0-2.5%
55965-84-9 reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H isothiazol-3-one [EC no. 220-239-6] (3:1)	.00101%

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

3 Hazard(s) identification

· Classification of the substance or mixture

Skin Sens. 1 H317 May cause an allergic skin reaction.

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



· Signal word Warning

(Contd. on page 2)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Sample Diluent

(Contd. of page 1)

· Hazard-determining components of labeling:

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Proclin 950 (Contains 2-methyl-2H-isothiazol-3-one)

Hazard statements

H317 May cause an allergic skin reaction.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves.

P321 Specific treatment (see on this label).
P363 Wash contaminated clothing before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

- Emergency overview:
- · Routes of exposure:

Ingestion Skin

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

Health = 0Fire = 0Reactivity = 0

4 First-aid measures

· After inhalation

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact Immediately wash with water and soap and rinse thoroughly.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Induce vomiting and call for medical help.

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: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

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

Ensure adequate ventilation.

(Contd. on page 3)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Sample Diluent

(Contd. of page 2)

· Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling

No special measures required.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · 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.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

- · 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.

DUS



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Sample Diluent

(Contd. of page 3)

Physical and chemical prope	rties	
General Information Appearance: Form:	Liquid	
Color: Odor:	Colorless Odorless	
Odour threshold:	Not determined.	
pH-value at 20 °C:	7.5	_
Change in condition Melting point/Melting range: Boiling point/Boiling range:	0 °C 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. Not determined.	
Vapor pressure at 20 °C:	23 hPa	
Density: Relative density Vapour density Evaporation rate	Not determined Not determined. Not determined. Not determined.	
Solubility in / Miscibility with Water:	Fully miscible	
Partition coefficient (n-octanol/wat	'er): Not determined.	
Viscosity: dynamic: kinematic:	Not determined. Not determined.	
Solvent content: Organic solvents: Water:	0.0 % 96.8 %	
Solids content: Other information	3.2 % 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.



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Sample Diluent

(Contd. of page 4)

· Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritant effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

2353-45-9 Fast Green FCF

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: Skin.

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.

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

- DU



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Sample Diluent

(Contd. of page 5)

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 MARPOL73/78 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 S	Substances	Control	Act):
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•	
9048-46-8	Bovine Serum Albumin
7647-14-5	sodium chloride

- 7758-11-4 dipotassium hydrogenorthophosphate
- 2353-45-9 Fast Green FCF
- 7778-77-0 potassium dihydrogenphosphate
- 10377-60-3 magnesium nitrate
- 7732-18-5 water
- · National regulations
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Sample Diluent

(Contd. of page 6)

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) Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

· * Data compared to the previous version altered.

DLIC



Printing date 06/03/2015 Reviewed on 06/02/2015

1 Identification

- · Product identifier
- · Trade name: Substrate
- · Catalog or product number: 425-2009
- · 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:

67-68-5 dimethyl sulfoxide

0.01-0.1%

· 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)



Safety Data Sheet

Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Substrate

· 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: No special measures required.
- 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:

7722-84-1 hydrogen peroxide solution

PEL (United States) 1.4 mg/m³, 1 ppm REL (United States) 1.4 mg/m³, 1 ppm TLV (United States) 1.4 mg/m³, 1 ppm

67-63-0 propan-2-ol

PEL (United States) 980 mg/m³, 400 ppm

(Contd. on page 3)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Substrate

(Contd. of page 2)

REL (United States) Short-term value: 1225 mg/m³, 500 ppm

Long-term value: 980 mg/m³, 400 ppm

TLV (United States) Short-term value: 984 mg/m³, 400 ppm

Long-term value: 492 mg/m³, 200 ppm

BEI

67-68-5 dimethyl sulfoxide

WEEL (United States) 250 ppm

- · 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.

9 Physical and chemical properties

- · 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

· Explosion limits: Lower:

· Relative density

· Vapour density

· Vapor pressure at 20 °C:

Upper:

· Density:

· General Information · Appearance:	
Form:	Liquid
Color:	Colorless
· Odor:	Odorless
· Odour threshold:	Not determined.
· pH-value at 20 °C:	5
· 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.

Not determined.

Not determined.

Not determined

Not determined.

Not determined.

23 hPa

(Contd. on page 4)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Substrate

		(Contd. of page 3
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible	
· Partition coefficient (n-octano	I/water): Not determined.	
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.2 %	
Water:	98.7 %	
Solids content:	1.0 %	
· 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)	
7722-84-1 hydrogen peroxide solution	3
67-63-0 propan-2-ol	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.

- DU



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Substrate

(Contd. of page 4)

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

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.

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

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

___ DUS



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Substrate

(Contd. of page 5)

15 Regulatory information

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

7722-84-1 hydrogen peroxide solution

Section 313 (40CFR372.65):

67-63-0 propan-2-ol

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · National regulations
- · Technical instructions (air):

Class	Share in %
NK	0.1-1.0

· 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)

· * Data compared to the previous version altered.

DUS



Printing date 06/03/2015 Reviewed on 06/02/2015

1 Identification

- · Product identifier
- · Trade name: Wash Concentrate
- · Catalog or product number: 425-2069
- · 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:
--------------------------------	-----------	----------	-----------	-------------

- 3 - m 3 - m m m m m m m m m m m m m m	
7732-18-5 water	50-100%
7647-14-5 sodium chloride	20-35%
7758-11-4 dipotassium hydrogenorthophosphate	2.5-5%

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

3 Hazard(s) identification

· Classification of the substance or mixture

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

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



GHS07

- · Signal word Warning
- · Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· Precautionary statements

P280 Wear protective gloves.

(Contd. on page 2)



Printing date 06/03/2015 Reviewed on 06/02/2015

Trade name: Wash Concentrate

(Contd. of page 1)

P280 Wear eye protection / face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P321 Specific treatment (see on this label).

P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

· Classification system

· NFPA ratings (scale 0-4)

Health = 1 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.

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.

Do not allow to enter sewers/ surface or ground 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

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

(Contd. on page 3)



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- · 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 Wash hands before breaks and at the end of work.
- · 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
- · Eve protection: Safety glasses
- · Body protection: Protective work clothing.

9 Physical and chemical properties

· 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: Boiling point/Boiling range:	undetermined 100 °C
Flash point:	Not applicable
Flammability (solid, gaseous)	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.

(Contd. on page 4)



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Trade name: Wash Concentrate

		(Contd. of page
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:	1.1931 g/cm³	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible	
Partition coefficient (n-octanol/	vater): Not determined.	
Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
Solvent content:		
Organic solvents:	0.0 %	
Water:	66.1 %	
Solids content:	33.6 %	
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:
- \cdot on the skin:

No irritant effect.

Irritant to skin and mucous membranes.

· on the eye:

No irritant effect.

Irritant effect.

· Sensitization: No sensitizing effects known.

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Trade name: Wash Concentrate

(Contd. of page 4)

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

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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.

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

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	

(Contd. on page 6)



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Trade name: Wash Concentrate

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	(Conta. or page 5)
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPO and the IBC Code	L73/78 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.

Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · 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 (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

* * Data compared to the previous version altered.



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1 Identification

- · Product identifier
- · Trade name: Stop Solution
- · Catalog or product number: 425-2010, 425-1227
- · 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:

7664-93-9 sulphuric acid

0.1-1.0%

· 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)



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Trade name: Stop Solution

· 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.

Do not allow to enter sewers/ surface or ground 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

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 Wash hands before breaks and at the end of work.
- · Breathing equipment: Not required.
- · Protection of hands: Protective gloves.
- Material of gloves Synthetic gloves

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Trade name: Stop Solution

(Contd. of page 2)

• 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

Physical and chemical prope	arues	
General Information		
Appearance:		
Form:	Liquid	
Color:	Colorless	
Odor:	Odorless	
Odour threshold:	Not determined.	
pH-value at 20 °C:	1.4	
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:	1.00459 g/cm³	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible	
Partition coefficient (n-octanol/wa	ter): Not determined.	
Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
Solvent content:		
Organic solvents:	0.0 %	
Water:	99.0 %	



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Trade name: Stop Solution

(Contd. of page 3)

· 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.

Caustic effect on skin and mucous membranes.

- · on the eye: No irritant effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories

7664-93-9 sulphuric acid

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· NTP (National Toxicology Program)

7664-93-9 sulphuric acid

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OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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.

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

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

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Trade name: Stop Solution

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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.

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

Transport information	
UN-Number ADR, ADN, IMDG, IATA	Void
UN proper shipping name ADR, ADN, IMDG, IATA	Void
Transport hazard class(es)	
ADR, ADN, IMDG, IATA Class	Void
Packing group ADR, IMDG, IATA	Void
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL and the IBC Code	L 73/78 Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.

15 Regulatory information

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

7664-93-9 sulphuric acid

Section 313 (40CFR372.65):

7664-93-9 sulphuric acid

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

(Contd. on page 6)



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Trade name: Stop Solution

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- · National regulations
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information

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IMDG: International Maritime Code for Dangerous Goods

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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