

27.07.2017

Kit Components

Product code	Description
962 962X 995 995X	qUAntify® Plus Control
Components:	
963	qUAntify® Plus Control, Level 1
964	qUAntify® Plus Control, Level 2

phone: 514-334-4372 fax: 514-334-0872



Safety Data Sheet

Printing date 27.07.2017 Reviewed on 27.07.2017

1 Identification

- · Product identifier
- · Trade name: qUAntify® Plus Control, Level 1
- · Catalog or product number: 963
- · 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 (Canada) Ltd.

2403 Guenette

Montreal. Quebec H4R 2E9

Canada

· Information department: CSD_Techsupport@bio-rad.com

Emergency telephone number: 514-334-4372

2 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

3 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: Void
- · Additional information

Contains human sourced and/or potentially infectious components.

Contains added constituents of animal origin.

For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- · Description of first aid measures
- General information

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

- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact

Immediately wash with water and soap and rinse thoroughly.

Generally the product does not irritate the skin.

- · After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- Information for doctor
- · Most important symptoms and effects, both acute and delayed Eye irritation

(Contd. on page 2)



Printing date 27.07.2017 Reviewed on 27.07.2017

Trade name: qUAntify® Plus Control, Level 1

(Contd. of page 1)

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Handle as potentially infectious.
- · Environmental precautions:

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

Keep contaminated washing water and dispose of appropriately.

Methods and material for containment and cleaning up:

Absorb liquid components with liquid-binding material.

Pick up mechanically.

Clean the affected area carefully; suitable cleaners are:

Disinfectant

· Reference to other sections 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.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

Refer to package insert for additional information regarding storage conditions.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- Control parameters
- · Components with limit values that require monitoring at the workplace:

7664-38-2 phosphoric acid

EL (Canada (LSG) English) | Short-term value: 3 mg/m³

Long-term value: 1 mg/m³

EV (Canada (LSG) English) Short-term value: 3 mg/m3

Long-term value: 1 mg/m3

(Contd. on page 3)



Printing date 27.07.2017 Reviewed on 27.07.2017

Trade name: qUAntify® Plus Control, Level 1

(Contd. of page 2)

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

Follow the usual biosafety practices for handling potentially infectious materials.

The usual precautionary measures for handling chemicals should be followed.

- 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. 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
- · Body protection: Protective work clothing.

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid
Color: Yellow
Odor: Odorless

• **pH-value at 20°C:** 5.5-5.7

Change in condition

Melting point/Melting range: undetermined Boiling point/Boiling range: undetermined

· Flash point: Not applicable

Auto igniting: Product is not selfigniting.

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

Density: Not determined

· Solubility in / Miscibility with

Water: Fully miscible

· Solvent content:

Water: 50-100 %

Solids content: 5.0 %

• Other information No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

(Contd. on page 4)



Printing date 27.07.2017 Reviewed on 27.07.2017

Trade name: qUAntify® Plus Control, Level 1

(Contd. of page 3)

- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions

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

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values for hazardous components per OSHA criteria:

57-13-6 urea

Oral LD50 14,500 mg/kg (rat)

- · 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.

12 Ecological information

- · Toxicity
- · 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.
- · Mobility in soil 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.

- Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

(Contd. on page 5)



Printing date 27.07.2017 Reviewed on 27.07.2017

Trade name: qUAntify® Plus Control, Level 1

· Other adverse effects No further relevant information available.

(Contd. of page 4)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

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)		
· DOT, ADR, ADN, IMDG, IATA · Class	Void	
· Packing group · DOT, ADR, IMDG, IATA	Void	
· Environmental hazards:	Not applicable.	
· Special precautions for user	Not applicable.	
· Transport in bulk according to Annex II of Ma and the IBC Code	ARPOL73/78 Not applicable.	
· UN "Model Regulation":	Void	

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)

٠,	Section 302/304 (40CFR355.30 / 40CFR355.40):
2	6628-22-8 sodium azide
- ,	Section 313 (40CFR372.65):
2	6628-22-8 sodium azide

· TSC4	(Toxic	Substances	Control	Act).
1007		Jubsiulices	COLLUCI	Δcii

57-13-6	
7664-38-2	phosphoric acid

1310-73-2 sodium hydroxide

(Contd. on page 6)



Printing date 27.07.2017 Reviewed on 27.07.2017

Trade name: qUAntify® Plus Control, Level 1

		(Contd. of page 5)	
		sodium hydrogencarbonate	
	100-51-6	Benzyl alcohol	
	26628-22-8	sodium azide	
	60-27-5	Creatinine	
	7732-18-5	water	
Ī	MAK (German Maximum Workplace Concentration)		

None of the ingredients is listed.

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

None of the ingredients is listed.

- National regulations
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · 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 27.07.2017 / -
- Abbreviations and acronyms:

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health



Printing date 27.07.2017 Reviewed on 27.07.2017

1 Identification

- · Product identifier
- · Trade name: qUAntify® Plus Control, Level 2
- · Catalog or product number: 964
- · 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 (Canada) Ltd.

2403 Guenette

Montreal, Quebec H4R 2E9

Canada

phone: 514-334-4372 fax: 514-334-0872

- · Information department: CSD_Techsupport@bio-rad.com
- Emergency telephone number: 514-334-4372

2 Hazard(s) identification

· Classification of the substance or mixture

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

Repr. 1 H360 May damage fertility or the unborn child.

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





GHS07 GHS08

- Signal word Danger
- · Hazard-determining components of labeling:

5-chloro-2-methyl-2H-isothiazol-3-one

· Hazard statements

H317 May cause an allergic skin reaction.

H360 May damage fertility or the unborn child.

· Precautionary statements

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P308+P313 IF exposed or concerned: Get medical advice/attention.

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

P363 Wash contaminated clothing before reuse.

- · Emergency overview:
- WHMIS classification

D2B - Toxic material causing other toxic effects

(Contd. on page 2)



Printing date 27.07.2017 Reviewed on 27.07.2017

Trade name: qUAntify® Plus Control, Level 2

(Contd. of page 1)



3 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:			
1330-43-4 boric acid, disodium salt	Repr. 1B, H360	≤1%	
26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one	Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 Skin Corr. 1B, H314 Skin Sens. 1, H317	≤1%	

·SVHC

1330-43-4 boric acid, disodium salt

Additional information

Contains human sourced and/or potentially infectious components.

Contains added constituents of animal origin.

For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- · Description of first aid measures
- · General information No special measures required.
- · 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. Then consult a doctor.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- Information for doctor
- · Most important symptoms and effects, both acute and delayed

Skin irritation

Eve irritation

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

- CA



Printing date 27.07.2017 Reviewed on 27.07.2017

Trade name: qUAntify® Plus Control, Level 2

(Contd. of page 2)

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Handle as potentially infectious.
- · Environmental precautions:

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

Keep contaminated washing water and dispose of appropriately.

Methods and material for containment and cleaning up:

Absorb liquid components with liquid-binding material.

Pick up mechanically.

Clean the affected area carefully: suitable cleaners are:

Disinfectant

Reference to other sections 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.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

Refer to package insert for additional information regarding storage conditions.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

1330-43-4 boric acid. disodium salt

EL (Canada (LSG) English) | Short-term value: 6 mg/m³

Long-term value: 2 mg/m3

EV (Canada (LSG) English) Short-term value: 6 mg/m³

Long-term value: 2 mg/m³

inorganic, inhalable

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

Follow the usual biosafety practices for handling potentially infectious materials. The usual precautionary measures for handling chemicals should be followed.

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

(Contd. on page 4)



Printing date 27.07.2017 Reviewed on 27.07.2017

Trade name: qUAntify® Plus Control, Level 2

(Contd. of page 3)

· 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. 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
- Body protection: Protective work clothing.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Liquid
Color: Yellow
Odor: Odorless

· Odor threshold: Not determined.

• **pH-value at 20°C:** 7.0-9.0

· Change in condition

Melting point/Melting range: undetermined **Boiling point/Boiling range:** undetermined

· Flash point: Not applicable

· Auto igniting: Product is not selfigniting.

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

· **Density:** Not determined

· Solubility in / Miscibility with

Water: Fully miscible

· Viscosity:

dynamic: Not determined.

Solvent content:

Organic solvents: 0.5 % Water: 50-100 %

Solids content: 2.1 %

· Other information No further relevant information available.

10 Stability and reactivity

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

(Contd. on page 5)



Printing date 27.07.2017 Reviewed on 27.07.2017

Trade name: qUAntify® Plus Control, Level 2

(Contd. of page 4)

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

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eve: 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)

7647-01-0 hydrochloric acid

3

NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · 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.
- · Mobility in soil 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.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

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

(Contd. on page 6)



Printing date 27.07.2017 Reviewed on 27.07.2017

Trade name: qUAntify® Plus Control, Level 2

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

(Contd. of page 5)

UN-Number		
DOT, ADR, ADN, IMDG, IATA	Void	
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Void	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA Class	Void	
Packing group DOT, ADR, IMDG, IATA	Void	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex II of I		
and the IBC Code	Not applicable.	
UN "Model Regulation":	Void	·

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture

Section 3	02/304 (40CFR355.30 / 40CFR355.40):
7647-01-0	hydrochloric acid
Section 3	13 (40CFR372.65):
7647-01-0	hydrochloric acid
7632-00-0	sodium nitrite
TSCA (Tox	ic Substances Control Act):
1330-43-4	boric acid, disodium salt
50-99-7	glucose
67-64-1	acetone
7647-01-0	hydrochloric acid
57-13-6	urea
60-27-5	Creatinine
9048-46-8	Bovine Serum Albumin
100-51-6	Benzyl alcohol
	Proprietary Reagent J2
1310-73-2	sodium hydroxide
	Proprietary Reagent XX
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one

(Contd. on page 7)



Printing date 27.07.2017 Reviewed on 27.07.2017

Trade name: qUAntify® Plus Control, Level 2

	(Contd. of page 6)	
2682-20-4	2-methyl-2H-isothiazol-3-one	
7632-00-0	sodium nitrite	
554-73-4	Orange IV	
7732-18-5	water	
MAK (Germ	· MAK (German Maximum Workplace Concentration)	

None of the ingredients is listed.

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

None of the ingredients is listed.

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

Class	Share in %
NK	≤1

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- 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 27.07.2017 / -
- Abbreviations and acronyms:

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

IMDG: International Maritime Code for Dangerous Goods

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

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health Acute Tox. 3: Acute toxicity - Category 3

Skin Corr. 1B: Skin corrosion/irritation - Category 1B

Skin Sens. 1: Skin sensitisation - Category 1 Repr. 1: Reproductive toxicity - Category 1 Repr. 1B: Reproductive toxicity - Category 1B