



09/01/2020

Kit Components

Product code	Description
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1762520	ProteOn™ Maintenance and Post Exp Clean Kit
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Components:

1764116	ProteOn™ Maintenance Solution 2, 70% Isopropyl Alcohol
1764119	ProteOn™ Postexperiment Cleaning Solution 2
1764115	ProteOn™ Maintenance & Post Expt Clean Solution 1, 2% Contrad 70

Safety Data Sheet

according to HPR, Schedule 1

Printing date 09/01/2020

Reviewed on 08/15/2020

1 Identification

- **Product identifier**
- **Trade name:** ProteOn™ Maintenance Solution 2, 70% Isopropyl Alcohol
- **Catalog or product number:** 1764116, 10022904
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Bio-Rad Laboratories (Canada) Ltd.
1329 Meyerside Drive
Mississauga, Ontario
L5T 1C9
Canada
- **Information department:** sales_canada@bio-rad.com
- **Emergency telephone number:** 1-800-424-6723 option 2

phone: 1-800-268-0213 Fax: 1-888-913-9779

2 Hazard identification

- **Classification of the substance or mixture**
Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.
Eye Irritation - Category 2A H319 Causes serious eye irritation.
Specific Target Organ Toxicity - Single Exposure - Category 3 H336 May cause drowsiness or dizziness.
- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**
propan-2-ol
- **Hazard statements**
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
- **Precautionary statements**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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Trade name: ProteOn™ Maintenance Solution 2, 70% Isopropyl Alcohol

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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:**

67-63-0	propan-2-ol Flammable Liquids - Category 2, H225 Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H336	45-70% w/w *
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* Actual concentration ranges are withheld as a trade secret.

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- **Description of first aid measures**
- **General information** Immediately remove any clothing soiled by the product.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact**
Generally the product does not irritate the skin.
Immediately rinse with water.
- **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, 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** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **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.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment (See section 8). Keep unprotected persons away.
Wear protective clothing.
- **Environmental precautions:**
Prevent seepage into sewage system, workpits and cellars.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

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Trade name: ProteOn™ Maintenance Solution 2, 70% Isopropyl Alcohol

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- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **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/exhaust at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **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:**

67-63-0 propan-2-ol

EL STEL: 400 ppm
TWA: 200 ppm

EV STEL: 400 ppm
TWA: 200 ppm

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

- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.

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Trade name: ProteOn™ Maintenance Solution 2, 70% Isopropyl Alcohol

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Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Breathing equipment:** Not necessary if room is well-ventilated. Adequate ventilation required.

· **Protection of hands:** Protective gloves.

· **Material of gloves:** Synthetic gloves

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Safety glasses

Tightly sealed goggles.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Liquid

Color: Colorless

· Odor: Alcohol-like

· Odor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: undetermined

Boiling point/Boiling range: 82 °C

· Flash point: < 23 °C

· Flammability (solid, gaseous) Not applicable.

· Ignition temperature: 425 °C

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits:

Lower: 2 Vol %

Upper: 12 Vol %

· Vapor pressure at 20 °C: 43 hPa

· Density at 20 °C: 0.84947 g/cm³

· Relative density Not determined.

· Vapor density Not determined.

· Evaporation rate Not determined.

· Solubility in / Miscibility with

Water: Fully miscible

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Trade name: ProteOn™ Maintenance Solution 2, 70% Isopropyl Alcohol

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- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - dynamic:** Not determined.
 - kinematic:** Not determined.
- **Solvent content:**
 - Organic solvents:** 64.7 %
 - Water:** 35.3 %
- **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.
- **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:**

67-63-0 propan-2-ol

Oral	LD50	4,570 mg/kg (rat)
Dermal	LD50	13,400 mg/kg (Rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** 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:
Irritant
- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

67-63-0 propan-2-ol

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Trade name: ProteOn™ Maintenance Solution 2, 70% Isopropyl Alcohol

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· 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.

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

14 Transport information

· UN-Number
· DOT/TDG, ADR, IMDG, IATA

UN1219

· UN proper shipping name
· DOT/TDG
· ADR

Isopropanol solution

1219 ISOPROPANOL (ISOPROPYL ALCOHOL) solution

1219 ISOPROPANOL mixture

ISOPROPANOL (ISOPROPYL ALCOHOL) solution

· IMDG, IATA
· Transport hazard class(es)
· DOT, ADR, IMDG, IATA
· Class

3 Flammable liquids

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Trade name: ProteOn™ Maintenance Solution 2, 70% Isopropyl Alcohol

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· Label	3
· Packing group · DOT/TDG, ADR, IMDG, IATA	II
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category	Warning: Flammable liquids 33 F-E, S-D B
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information: · DOT/TDG · Quantity limitations	Void Void
· ADR · Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL) SOLUTION, 3, II

15 Regulatory information

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

· **Section 302/304 (40CFR355.30 / 40CFR355.40):**

None of the ingredients is listed.

· **Section 313 (40CFR372.65):**

67-63-0 | propan-2-ol

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

All components have the value ACTIVE.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

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Trade name: ProteOn™ Maintenance Solution 2, 70% Isopropyl Alcohol

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· National regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

· Technical instructions (air):

Class	Share in %
NK	45-70

· 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 the latest revision of the safety data sheet 09/01/2020 / -

· Abbreviations and acronyms:

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.

Safety Data Sheet

according to HPR, Schedule 1

Printing date 09/01/2020

Reviewed on 08/15/2020

1 Identification

- **Product identifier**
- **Trade name:** *ProteOn™ Postexperiment Cleaning Solution 2*
- **Catalog or product number:** 1764119
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Bio-Rad Laboratories (Canada) Ltd.
1329 Meyerside Drive
Mississauga, Ontario
L5T 1C9
Canada
- **Information department:** sales_canada@bio-rad.com
- **Emergency telephone number:** 1-800-424-6723 option 2

phone: 1-800-268-0213 Fax: 1-888-913-9779

2 Hazard identification

- **Classification of the substance or mixture**
Skin Corrosion - Category 1A H314 Causes severe skin burns and eye damage.
Serious Eye Damage - Category 1 H318 Causes serious eye damage.
- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05

- **Signal word** Danger
- **Hazard statements**
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a poison center/doctor.
P321 Specific treatment (see on this label).
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/Information on ingredients

- **Chemical characterization:** Substances
- **CAS No. Description:**
7732-18-5 water

(Contd. on page 2)

Safety Data Sheet

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Reviewed on 08/15/2020

Trade name: ProteOn™ Postexperiment Cleaning Solution 2

(Contd. of page 1)

- **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:** Not applicable.
- **Additional information** For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- **Description of first aid measures**
- **General information** Immediately remove any clothing soiled by the product.
- **After inhalation** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact**
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing**
Drink copious amounts of water and provide fresh air. Immediately call a doctor.
Rinse mouth with water. Seek medical attention and appropriate follow-up.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **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** During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment (See section 8). Keep unprotected persons away.
Wear protective clothing.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.

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Trade name: ProteOn™ Postexperiment Cleaning Solution 2

See Section 13 for disposal information.

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7 Handling and storage

- **Handling**
- **Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaust at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **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:** Keep receptacle tightly sealed.
- **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:**
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.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not necessary if room is well-ventilated. Adequate ventilation required.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
Safety glasses
Tightly sealed goggles.

CA
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Trade name: ProteOn™ Postexperiment Cleaning Solution 2

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Color:	Colorless
Odor:	Odorless
Odor threshold:	Not determined.

· pH-value at 20 °C: 1.7

· Change in condition

Melting point/Melting range:	0 °C
Boiling point/Boiling range:	undetermined

· Flash point: Not applicable
Not determined.

· Flammability (solid, gaseous) Not applicable.

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Not determined.

· Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Vapor pressure at 20 °C: 23 hPa

· Density at 20 °C: 1.00009 g/cm³

· Relative density Not determined.

· Vapor density Not determined.

· Evaporation rate Not determined.

· Solubility in / Miscibility with

Water: Fully miscible

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

· Viscosity:

dynamic:	Not determined.
kinematic:	Not determined.

· Solvent content:

Water: 99.9 %

· Other information No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

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according to HPR, Schedule 1

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Trade name: ProteOn™ Postexperiment Cleaning Solution 2

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- **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.
- **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:**
Strong caustic effect on skin and mucous membranes.
Caustic effect on skin and mucous membranes.
 - **on the eye:**
Strong caustic effect.
Strong irritant with the danger of severe eye injury.
 - **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:
Corrosive
Irritant
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
 - **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:**
Generally not hazardous for water.
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
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: ProteOn™ Postexperiment Cleaning Solution 2

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

14 Transport information

- | | |
|---|---|
| <ul style="list-style-type: none"> · UN-Number · DOT/TDG, ADR, ADN, IMDG, IATA | Not Regulated |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT/TDG, ADN, IMDG, IATA · ADR | Not Regulated
Not Regulated
Not Regulated |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class | Not Regulated |
| <ul style="list-style-type: none"> · Packing group · DOT/TDG, ADR, IMDG, IATA | Not Regulated |
| <ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: | No |
| <ul style="list-style-type: none"> · Special precautions for user | Not applicable. |
| <ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| <ul style="list-style-type: none"> · UN "Model Regulation": | Not Regulated |

CA

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Trade name: ProteOn™ Postexperiment Cleaning Solution 2

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15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **SARA (Superfund Amendments 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 components have the value ACTIVE.

- **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

- **National regulations**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

- **Water hazard class:** Generally not 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 the latest revision of the safety data sheet** 09/01/2020 / -

- **Abbreviations and acronyms:**

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

Safety Data Sheet

according to HPR, Schedule 1

Printing date 09/01/2020

Reviewed on 08/11/2020

1 Identification

- **Product identifier**
- **Trade name:** *ProteOn™ Maintenance & Post Expt Clean Solution 1, 2% Contrad 70*
- **Catalog or product number:** 1764115, 1764118, 10021449, 10022850
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Bio-Rad Laboratories (Canada) Ltd.
1329 Meyerside Drive
Mississauga, Ontario
L5T 1C9
Canada
- phone: 1-800-268-0213 Fax: 1-888-913-9779
- **Information department:** sales_canada@bio-rad.com
- **Emergency telephone number:** 1-800-424-6723 option 2

2 Hazard identification

- **Classification of the substance or mixture**
Skin Corrosion - Category 1A H314 Causes severe skin burns and eye damage.
Serious Eye Damage - Category 1 H318 Causes serious eye damage.
- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05

- **Signal word** Danger
- **Hazard statements**
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a poison center/doctor.
P321 Specific treatment (see on this label).
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/Information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description:**
7732-18-5 water

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- **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:** Not applicable.
- **Additional information** For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- **Description of first aid measures**
- **General information** Immediately remove any clothing soiled by the product.
- **After inhalation** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact**
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing**
Drink copious amounts of water and provide fresh air. Immediately call a doctor.
Rinse mouth with water. Seek medical attention and appropriate follow-up.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **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** During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment (See section 8). Keep unprotected persons away.
Wear protective clothing.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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7 Handling and storage

- **Handling**
- **Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaust at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **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:** Keep receptacle tightly sealed.
- **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:**
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.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not necessary if room is well-ventilated. Adequate ventilation required.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
Safety glasses
Tightly sealed goggles.

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Color:	Colorless
Odor:	Odorless
Odor threshold:	Not determined.

· pH-value at 20 °C: 12

· Change in condition

Melting point/Melting range:	0 °C
Boiling point/Boiling range:	undetermined

· Flash point: Not applicable
Not determined.

· Flammability (solid, gaseous) Not applicable.

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Not determined.

· Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Vapor pressure at 20 °C: 23 hPa

Density at 20 °C:	1 g/cm ³
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.

· Solubility in / Miscibility with

Water: Fully miscible

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

· Viscosity:

dynamic:	Not determined.
kinematic:	Not determined.

· Solvent content:

Organic solvents:	0.0 %
Water:	99.8 %

Solids content: 0.2 %

· Other information No further relevant information available.

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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.
- **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:**
Strong caustic effect on skin and mucous membranes.
Caustic effect on skin and mucous membranes.
- **on the eye:**
Strong caustic effect.
Strong irritant with the danger of severe eye injury.
- **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:
Corrosive
Irritant
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)	
Proprietary Reagent CP 12	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.

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Additional ecological information:
General notes:

Generally not hazardous for water.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

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

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.

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

14 Transport information

UN-Number

DOT/TDG, ADR, ADN, IMDG, IATA

Not Regulated

UN proper shipping name

DOT/TDG, ADN, IMDG, IATA

Not Regulated

ADR

Not Regulated

Not Regulated

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class

Not Regulated

Packing group

DOT/TDG, ADR, IMDG, IATA

Not Regulated

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.

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· **UN "Model Regulation":** Not Regulated

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA (Superfund Amendments 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	ACTIVE
	Proprietary Reagent KT2	*
	Proprietary Reagent S	*
	Proprietary Reagent CP 12	*
	Proprietary Reagent	*

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **National regulations**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

- **Water hazard class:** Generally not 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 the latest revision of the safety data sheet** 09/01/2020 / -

· **Abbreviations and acronyms:**

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)

PBT: Persistent, Bioaccumulative and Toxic

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vPvB: very Persistent and very Bioaccumulative

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