Safety Data Sheet acc. to OSHA HCS

Printing date 02/02/2015 Reviewed on 02/02/2015 1 Identification · Product identifier Trade name: ProteOn Maintenance Solution 3 · Catalog or product number: 1764113, 10004020 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available. · Application of the substance / the mixture Laboratory chemicals · Details of the supplier of the safety data sheet • Manufacturer/Supplier: Bio-Rad Laboratories, Life Science Group 2000 Alfred Nobel Drive Hercules, California 94547 (510)741-1000 · Information department: Technical services, customer support lsg techserv us@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. 510-741-1000 2 Hazard(s) identification Classification of the substance or mixture Skin Corr. 1C H314 Causes severe skin burns and eye damage. · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Corrosive. May cause irreversible eye damage. C: Corrosive Causes burns. R34:

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.

· Label elements

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



· Signal word Danger

· Hazard statements

H314 Causes severe skin burns and eye damage.

Safety Data Sheet acc. to OSHA HCS

Printing date 02/02/2015

Reviewed on 02/02/2015

Trade name: ProteOn Maintenance Solution 3

(Contd. of page 1)

P260 Do not breathe dusts or mists. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ 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.
- P405 Store locked up.

Precautionary statements

- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- · Additional information: Contact with acids may cause release of toxic gases
- Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 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: 		
497-19-8 sodium carbonate	Xi R36	1.0-2.5%
7681-52-9 sodium hypochlorite, solution	C R34 N R50 R31	0.01-0.1%

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

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.
- 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.
- · 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.

USA

Safety Data Sheet acc. to OSHA HCS

Printing date 02/02/2015

Reviewed on 02/02/2015

(Contd. of page 2)

Trade name: ProteOn Maintenance Solution 3

· 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 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. See Section 13 for disposal information.

7 Handling and storage

- Precautions for safe handling
 No special measures required.
 Ensure good ventilation/exhaustion at the workplace.
 Prevent formation of aerosols.
 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: 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.

(Contd. on page 4)

Page 3/7

Safety Data Sheet acc. to OSHA HCS

Printing date 02/02/2015

Reviewed on 02/02/2015

Trade name: ProteOn Maintenance Solution 3

(Contd. of page 3)

Page 4/7

Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with the eyes and 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.
 Eye protection: Safety glasses

Tightly sealed goggles.

9 Physical and chemical properties

 Information on basic physical General Information 	l and chemical properties
· Appearance:	
Form:	Liquid
Color:	Colorless
· Odor:	Odorless
· pH-value at 20 °C:	12.3
 Change in condition Melting point/Melting range Boiling point/Boiling range: 	
· Flash point:	Not applicable
· Danger of explosion:	Product does not present an explosion hazard.
 Vapor pressure at 20 °C: 	23 hPa
· Density at 20 °C:	1 g/cm³
 Solubility in / Miscibility with Water: 	Fully miscible
· Solvent content:	
Organic solvents:	0.0 %
Water:	97.8 %
Solids content:	2.2 %
· Other information	No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · 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.

Safety Data Sheet acc. to OSHA HCS

Printing date 02/02/2015

Reviewed on 02/02/2015

Trade name: ProteOn Maintenance Solution 3

· Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Strong caustic effect.
- · Sensitization: No sensitizing effects known.
- Additional toxicological information:

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)

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: Skin.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · 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 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.

USA

(Contd. of page 4)

Safety Data Sheet acc. to OSHA HCS

RIO-RAI

Trade name: ProteOn Maintenance Solution 3

Hand over to hazardous waste disposers.

· Uncleaned packagings:

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

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

UN-Number	
DOT, ADR, ADN, IMDG, IATA	Void
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: 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.
UN "Model Regulation":	-

15 Regulatory information

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

- · 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.

Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.



(Contd. of page 5)



Page 6/7

Reviewed on 02/02/2015

Printing date 02/02/2015

Safety Data Sheet acc. to OSHA HCS

Printing date 02/02/2015

Reviewed on 02/02/2015

Trade name: ProteOn Maintenance Solution 3

(Contd. of page 6)

Page 7/7

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

None of the ingredients is listed.

· National 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 preparation / last revision 02/02/2015 / -

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
 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)
 Skin Corr. 1C: Skin corrosion/irritation, Hazard Category 1C
 * Data compared to the previous version altered.