

2.2. Label elements

SAFETY DATA SHEET

according to Regulation (EU) 2015/830

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BioSentry® AquaPrime® Activator

	Revision date 2020-02-04	
SECTION 1: Identification of	f the substance/mixture and of the company/undertaking	
1.1. Product identifier		
Product name	BioSentry® AquaPrime® Activator	
Product code	142250, 142350, 142450	
1.2. Relevant identified uses of	the substance or mixture and uses advised against	
Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [PC20] Products such as pH-regulators, flocculants, precipitants, neutralization agents;	
Description	Chlorine dioxide activator and drinking water acidifier.	
1.3. Details of the supplier of the	e safety data sheet	
Company	Neogen Corporation	
Address	620 Lesher Place Lansing MI 48912 USA	
Web	www.neogen.com	
Telephone	517-372-9200/800-234-5333	
Email	SDS@neogen.com	
1.4. Emergency telephone num	ber	
	24 hours: Medical: 1-800-498-5743 (U.S. and Canada) or 1-651-523-0318 (international) Spill/CHEMTREC: 1-800-424-9300 (U.S. and Canada) or 1-703-527-3887 (international)	
Further information		
	Preserve International 944 Nandino Blvd. Lexington, KY 40511-1205 U.S.A. Preserve International is a wholly-owned subsidiary of Neogen Corporation.	
SECTION 2: Hazards identification		
2.1. Classification of the substan	nce or mixture	
2.1.2. Classification - EC 1272/2008	Skin Corr. 1B: H314; Aquatic Chronic 3: H412;	

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2.2. Label elements

2.2. Label elements	
Hazard pictograms	
Signal Word	Danger
Hazard Statement	Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Precautionary Statement: Prevention	P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P264 - Wash thoroughly after handling. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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/. P363 - Wash contaminated clothing before reuse.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to an approved hazardous/special waste disposal facility in accordance with local and national regulations
2.3. Other hazards	
Other hazards	May be harmful if inhaled.

Other nazards	iviay be narmful if innaled.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Sulfuric acid (Sulphuric acid (mist))		7664-93-9	231-639-5		1 - 10%	Skin Corr. 1B: H314;
Hydrogen chloride (Hydrogen chloride (gas and aerosol mists))	017-002-00-2	7647-01-0	231-595-7		1 - 10%	Acute Tox. 3: H331; Skin Corr. 1A: H314;
Citric acid monohydrate		77-92-9	201-069-1		1 - 10%	Eye Dam. 1: H318;
copper sulphate pentahydrate	029-023-00-4	7758-99-8	231-847-6		0 - 0.5%	Acute Tox. 4: H302; Eye Dam. 1: H318; Aquatic Acute 1: H400; Aquatic Chronic 1: H410;

Description

	Concent	trations	s listed	l are r	not proc	luct	specifications.

Further information

Full text of Hazard Statements listed in this Section is provided in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. Immediate medical attention is required. If unconscious,
	check for breathing and apply artificial respiration if necessary. If breathing is difficult give oxygen.

	Nevision date 2020-02:
4.1. Description of first aid n	neasures
	If breathing stops, provide artificial respiration.
Eye contact	Remove the affected person from the source of contamination immediately. Hold eye open and rinse slowly and gently with water for 15-20 minutes. Contact lenses should be removed. Immediate medical attention is required.
Skin contact	Remove the affected person from the source of contamination immediately. After contact with skir take off immediately all contaminated clothing, and wash immediately with plenty of soap and water. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Immediate medical attention is required.
Ingestion	Rinse mouth thoroughly. Do not induce vomiting unless told to do so by the poison control center or doctor. Probable mucosal damage may contraindicate the use of gastric lavage. Never give anything by mouth to an unconscious person. Immediate medical attention is required.
I.2. Most important symptor	ns and effects, both acute and delayed
Inhalation	Corrosive to the respiratory tract. Causes burns. In severe cases, may cause loss of consciousness. May cause irritation to mucous membranes. May cause dizziness and headache.
Eye contact	Risk of serious damage to eyes. Causes severe inflammation and may damage the cornea. Danger of very serious irreversible effects.
Skin contact	Corrosive to living tissue. Causes skin burns. Danger of very serious irreversible effects.
Ingestion	Corrosive to living tissue. Causes severe burns. Danger of very serious irreversible effects. Ingestion may cause nausea and vomiting.
4.3. Indication of any immed	liate medical attention and special treatment needed
	Remove the affected person from the source of contamination immediately. Transfer to hospital if
	there are burns or symptoms of poisoning. Immediate medical attention is required. If medical advice is needed, have product container or label at hand.
SECTION 5: Firefighting	measures
5.1. Extinguishing media	
	Use extinguishing media appropriate to the surrounding fire conditions.
5.2. Special hazards arising	from the substance or mixture
	Corrosive. Do not breathe vapour or spray mist.
5.3. Advice for firefighters	
	In case of fire and/or explosion do not breathe fumes. Do not breathe vapour or spray mist. Wears Self-contained breathing apparatus, Protective equipment.
SECTION 6: Accidental r	release measures
	protective equipment and emergency procedures
	In the case of cleanup following a spill, wear protective clothing and appropriate equipment to prevent exposure of skin and eyes and to prevent ingestion or inhalation. Ensure adequate ventilation of the working area. Keep personnel away from spill. Avoid contact with eyes and skin. Avoid prolonged or repeated exposure. Keep away from incompatible materials.
6.2. Environmental precaution	
	Prevent further spillage if safe. Clean spillage area thoroughly with plenty of water. Do not flush into surface water. Do not let product contaminate subsoil.
6.3. Methods and material fo	or containment and cleaning up
	Absorb with inert, absorbent material. Collect spillage. Transfer to suitable, labelled containers for disposal. Dispose of this material and its container to hazardous or special waste collection point. Clean spillage area thoroughly with plenty of water. Do not contaminate water by cleaning of

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6.3. Methods and material for containment and cleaning up

equipment or disposal of wastes.

6.4. Reference to other sections

See Section(s) 2, 8, and 13 for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Adopt best Manual Handling considerations when handling, carrying and dispensing. Handle and open container with care. Do not breathe vapour or spray mist. Ensure adequate ventilation of the working area. In case of insufficient ventilation, wear suitable respiratory equipment. Causes eye damage and skin damage. Wear chemical protective clothing. Wear goggles or face shield and rubber gloves when handling this product. Wash the outside of gloves before removing them. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Contaminated work clothing should not be allowed out of the workplace. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not eat, drink or smoke in areas where this product is used or stored. Read the entire label and follow all use directions, restrictions, and precautions.

7.2. Conditions for safe storage, including any incompatibilities

Store in original container in a cool, dry place inaccessible to children and pets. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal. Keep containers closed and away from other chemicals. Do not store with incompatible substances or mixtures. Follow label instructions.

7.3. Specific end use(s)

See Section(s) 1.2 for further information.

Further information

Refer to product label and/or package insert for additional information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Exposure Limit Values

Hydrogen chloride (Hydrogen chloride (gas and aerosol mists))	WEL 8-hr limit ppm: 1	WEL 8-hr limit mg/m3: 2
	WEL 15 min limit ppm: 5	WEL 15 min limit mg/m3: 8
	WEL 8-hr limit mg/m3 total - inhalable dust:	WEL 15 min limit mg/m3 total - inhalable dust:
	WEL 8-hr limit mg/m3 total - respirable dust:	WEL 15 min limit mg/m3 total - respirable dust:
Sulfuric acid (Sulphuric acid (mist))	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: 0.05
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: -
	WEL 8-hr limit mg/m3 total - inhalable dust:	WEL 15 min limit mg/m3 total - inhalable dust:
	WEL 8-hr limit mg/m3 total - respirable dust:	WEL 15 min limit mg/m3 total - respirable dust:

8.2. Exposure controls

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8.2. Exposure controls







8.2.1. Appropriate engineering controls

Ensure adequate ventilation of the working area. Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects.

8.2.2. Individual protection measures

Wear chemical protective clothing. Do not breathe dust or vapour.

Eye / face protection

Wear: Chemical safety goggles, Face shield.

Skin protection - Handprotection

Wear: Chemical resistant gloves. Wash the outside of gloves before removing them. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Skin protection - Other

After contact with skin, wash immediately with plenty of soap and water. Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Occupational exposure controls

Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Provide chemical shower. Provide eye wash station.

Protect clothing from contact with the product. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Avoid contamination of

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Clear/Light green
Odour	Pungent
Evaporation rate	No data available
Flammability (solid, gas)	Not applicable.
Vapour pressure	No data available
Vapour density	No data available
Relative density	1.08 - 1.12
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive properties	Not applicable.
Oxidising properties	No data available
Odour threshold	No data available
рН	No data available
Melting point	No data available
Freezing Point	No data available
Initial boiling point	No data available
Flash point	No data available

Solubility

Soluble in water

9.2. Other information

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9.2. Other information

Gas group VOC (Volatile organic compounds)

Not applicable.

Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4. Conditions to avoid

Keep away from extreme temperatures. Keep away from incompatible materials.

10.5. Incompatible materials

Keep away from strong bases, Alkali metals, Amines.

10.6. Hazardous decomposition products

Carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Based on available data, the classification criteria are not met. However, this product does contain substance(s) that are classified as hazardous. For more information, see Section 3.
Corrosive to living tissue. Causes burns. Possible risk of irreversible effects.
Causes severe burns. Causes severe inflammation and may damage the cornea. Possible risk of irreversible effects.
May cause allergic reactions in susceptible people.
No mutagenic effects reported.

Carcinogenicity

Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-123.

Not listed in the National Toxicology Program (NTP) 14th Report on Carcinogens.

Components(s) may cause damage to human organs based on animal data.

Not listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values.

Not listed in the OSHA standard 1910.1003 Carcinogens.

Reproductive toxicity STOT-single exposure

No teratogenic effects reported.

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause oral mucosal

STOT-repeated exposure

No Significant Hazard.

Aspiration hazard Repeated or prolonged exposure

Avoid prolonged or repeated exposure. Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible.

11.1.2. Mixtures

11.1.2. Mixtures	
	See Section(s) 3 for further information.
11.1.3. Hazard Information	
	See Section(s) 2 and 3 for further information.
11.1.5. Hazard Class	
	See Section(s) 2 and 4 for further information.
11.1.6. Classification Criteria	
	Based on the Globally Harmonised System (GHS) considerations for the classification of mixtures. See Section 15 for regulatory citations.
11.1.7. Information on likely rou	tes of exposure
	Eye contact. Skin contact. Inhalation. Ingestion.
11.1.8. Symptoms related to the	e physical, chemical and toxicological characteristics
	See Section(s) 4.2 for further information.
11.1.9. Delayed and immediate	effects as well as chronic effects from short and long-term exposure
	See Section(s) 4.2 for further information.
11.1.10. Interactive effects	·
	No data available.
11.1.11. Absence of specific da	ta
	<1% of this mixture consists of ingredients of unknown acute toxicity.
11.1.12. Mixture versus substar	nce information
	See Section(s) 3 for further information.
11.1.13. Other information	·
	Caution - substance not yet fully tested.
SECTION 12: Ecological info	ormation
12.1. Toxicity	
12.11. Toxiony	No data available
12.2. Persistence and degradate	1
	No data is available on this product.
12.3. Bioaccumulative potential	The data is available on this product.
Diodocamaida Potorida	
	No data is available on this product.
Partition coefficient	'
	BioSentry® AquaPrime® No data available
	Activator
12.4. Mobility in soil	
12.7. MODING III GON	No data is available on this product.
12.5. Results of PBT and vPvB	
12.0. I Coulto OI I DI AIIU VEVD	No data is available on this product.
	140 data is available off this product.

12.6. Other adverse effects	
	May cause long-term adverse effects in the aquatic environment.
SECTION 13: Disposal cons	iderations
13.1. Waste treatment methods	
	Dispose of contents/container to an approved hazardous/special waste disposal facility in accordance with local and national regulations. Do not discharge effluent containing this product to sewer systems. Follow label instructions.
Disposal methods	
	Dispose of contents/container to an approved hazardous/special waste disposal facility in accordance with local and national regulations. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not empty into drains; dispose of this material and its container in a safe way. Do not flush into surface water. Do not let product contaminate subsoil.
Disposal of packaging	
	Nonrefillable container. Do not reuse or refill this container. If empty: Do not reuse this container. Place in trash or offer for recycling, if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain. Empty containers can be sent to landfill after cleaning, if in compliance with local and national regulations. Can be recycled if in compliance with local and national regulations.
Further information	
	Refer to product label and/or package insert for additional information.
SECTION 14: Transport info	rmation
Hazard pictograms	
14.1. UN number	<u>'</u>
	UN1760
14.2. UN proper shipping name	
	CORROSIVE LIQUID, N.O.S. (Hydrochloric acid, Sulfuric acid)
14.3. Transport hazard class(es)
ADR/RID	8
Subsidiary risk IMDG	- 8
Subsidiary risk] -
IATA	8
Subsidiary risk	<u> - </u>
14.4. Packing group	
Packing group	11
14.5. Environmental hazards	
Environmental hazards	No

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14.5. Environmental hazards	vironmental hazards	
Marine pollutant	No	
ADR/RID		
Hazard ID	80	
Tunnel Category	(E)	
IMDG		
EmS Code	F-A S-B	
IATA		
Packing Instruction (Cargo)	855	
Maximum quantity	30 L	
Packing Instruction	851	
(Passenger)		
Maximum quantity	1L	

SECTION 15: Regulatory information

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

Regulations	1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
Chemical	International
Inventorios/Dight to Masse	Basel Convention (Hazardous Maste), HR

Inventories/Right-to-Know Lists:

Basel Convention (Hazardous Waste): H8.

Chemical Weapons Convention (OPCW): This material contains no reportable components.

Kyoto Protocol Greenhouse Gases: This material contains no reportable components.

Mercosur Agreement: Not applicable.

Montreal Protocol: This material contains no reportable components.

The Rotterdam Convention: This material contains no reportable components. The Stockholm Convention: This material contains no reportable components.

--Asia and the ASEAN Nations--.

Catalog of Hazardous Chemicals (China): [2507, Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0], [1302, Sulfuric acid, CAS No. 7664-93-9].

Regulation of Minister of Trade of the Republic of Indonesia, Number 75, Year 2014, regarding The Second Amendment of Minister of Trade, Number 44, Year 2009, Regarding Provision, Distribution, and Control of Hazardous Substances: Usable hazardous and toxic material, [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0], [Sulfuric acid, CAS No. 7664-93-9].

Chemical Substances Control Law (Japan): Air Pollution Control Law:, Water Pollution Control Law:, [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

Industrial Safety and Health Act, Dangerous Substances (Japan): Labeling/Notification required, Group 3 specified substance, [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0], [Sulfuric acid, CAS No. 7664-93-9], [Copper sulfate (copper compounds), CAS No. 7758-99-8].

Poisonous and Deleterious Substances Act (Japan): Deleterious, [Copper sulfate (copper compounds), CAS No. 7758-99-8].

Chemical Substances Subject to Permission (Korea): This material contains no reportable components.

Restricted or Prohibited Substances (Korea): This material contains no reportable components. Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): Schedule I exposure standard, CLASS regulation, [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0], [Sulfuric acid, CAS No. 7664-93-9].

Philippine Inventory of Chemicals and Chemical Substances (PICCS): [CPEC, Table II - Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

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

Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): [1/87, Sulfuric acid, CAS No. 7664-93-9].

Hazardous Substances Act (Thailand): This material contains no reportable components. Law on Chemicals (Vietnam): Annex I, Appendix IV, Appendix V, Appendix VI, Appendix VII, [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0], [Sulfuric acid, CAS No. 7664-93-9].

--Australia and New Zealand--.

Australian Dangerous Goods Code: Class 8.

Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt. New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt.

--European Union (EU) and the United Kingdom (UK)--.

Authorisation List (Annex XIV of REACH): This material contains no reportable components.

Annex XVII for REACH: This material contains no reportable components.

Article 95 of the Biocidal Products Regulation (BPR): [PT2, Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

--North America --.

Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt.

Toxic Substances Control Act (TSCA): All ingredients listed or exempt.

Massachusetts Right-to-Know Hazardous Substance List: Hydrochloric acid, Sulfuric acid.

New Jersey Worker and Community Right to Know Act: Hydrogen chloride, Sulfuric acid, Copper sulfate

Pennsylvania Right to Know Law: Hydrochloric acid, Sulfuric acid.

Rhode Island Right-to-Know General Law: Hydrochloric acid, Sulfuric acid.

California Proposition 65: This material contains no reportable components.

SECTION 16: Other information

Other information

Revision

This document differs from the previous version in the following areas:.

2 - 2.1. Classification of the substance or mixture.

12 - 12.1. Toxicity.

15 - Labelling.

15 - Hazard Statement.

15 - Safety phrases.

15 - Chemical Inventories/Right-to-Know Lists:.

Acronyms

ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by

Rail (RID) and by Road (ADR).

CAS No.: Chemical Abstracts Service.

CLASS: Classification, Labelling, and Safety Data Sheet of Hazardous Chemicals Regulation 2013

(Malaysia).

GHS: Globally Harmonized System.

HCS 2012: U.S. Hazard Communication Standard (2012 revision).

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organisation.

IMDG: International Maritime Dangerous Goods.

LD: Lethal dose.

OEL: Occupational exposure limit.

OSHA: U.S. Occupational Safety and Health Administration.

PEL: Permissible Exposure Limit.

REACH: Registration, Evaluation, Authorisation, and Restriction of Chemicals.

	101,001,001,001
Other information	
Text of Hazard Statements in Section 3	SVHC: Substance of very high concern. US DOT: United States Department of Transportation. VOC: Volatile Organic Compound. WEL: Workplace Exposure Limit. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Skin Corr. 1A: H314 - Causes severe skin burns and eye damage. Acute Tox. 3: H331 - Toxic if inhaled. Eye Dam. 1: H318 - Causes serious eye damage. Acute Tox. 4: H302 - Harmful if swallowed. Aquatic Acute 1: H400 - Very toxic to aquatic life.
	Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
Further information	
	DISCLAIMER: The information and recommendations set forth herein ("Information") are presented in good faith and believed to be correct as of the date issued. No representation is made regarding the completeness or accuracy of the Information. Further, because of the many factors that affect the use of this product, the Information is supplied upon the condition that the person(s) receiving it will make their own determination regarding its suitability for their own unique purpose(s), prior to use.
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