

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. Wash skin with soap and water. Consult a physician.
Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. Call a physician immediately.
Ingestion	Do NOT induce vomiting. Drink plenty of water. Consult a physician. Never give anything by mouth to an unconscious person.
Self-protection of the first aider	Use personal protective equipment. See section 8 for more information. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. FIRE-FIGHTING MEASURES

Flammable properties	Not a fire hazard.
Flash point	Not Applicable
Suitable extinguishing media	Water spray, dry chemical, carbon dioxide (CO ₂), or foam.

NFPA	Health hazard 1	Flammability 0	Stability 0	Physical and Chemical Hazards -
HMIS	Health hazard 1	Flammability 0	Stability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	See section 8. Use personal protective equipment. Avoid contact with skin, eyes, and inhalation of vapors.
Methods for containment	Absorb/Cover spill with sodium bicarbonate or sodium carbonate to neutralize, then place in a chemical waste container for later disposal. Dispose according to local regulations, if permitted dissolve in water and rinse to drain.
Methods for cleaning up	After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using this product.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from oxidizing agents. Keep away from direct sunlight. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines

Chemical name	CAS No	ACGIH TLV	OSHA PEL	NIOSH IDLH
Indicator	-	None known	None known	None known
Polyvinyl polymer	-	None known	None known	None known
Hydrochloric acid	7647-01-0	Ceiling: 2 ppm	Ceiling 5 ppm (7mg/m ³)	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m ³
Phenol	108-95-2	TWA: 5 ppm	TWA: 5 ppm TWA: 19 mg/m ³	IDLH: 250 ppm Ceiling: 15.6 ppm Ceiling: 60 mg/m ³

				TWA: 5 ppm TWA: 19 mg/m ³
Buffering agent	-	None known	None known	None known
Water	7732-18-5	None known	None known	None known

Engineering Measures
Showers
Eyewash stations
Ventilation systems.

Personal protective equipment**Eye/Face Protection**

Wear safety glasses with side shields (or goggles).

Skin and body protection

Wear protective gloves/clothing.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	dark amber	Odor	Odorless
Physical state	liquid	pH	2.0 - 3.5
Flash point	Not Applicable	Boiling point / boiling range	ca 100°C/212°F
Vapor pressure	<17 mmHg @ 20°C	Vapor density	<1(Air = 1)

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of use and storage.

Incompatible Products Strong oxidizing agents. Nitric acid.

Conditions to avoid Excessive heat. Direct sunlight. Incompatible products.

Hazardous decomposition products Hazardous decomposition products formed under fire conditions -. Carbon oxides (COx).

Hazardous polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity**Oral LD50****Oral LD50****Dermal LD50****Dermal LD50 No information available**

Chemical name	CAS No	Oral LD50	Dermal LD50	Inhalation LC50
Indicator	-	None known	None known	None known
Polyvinyl polymer	-	None known	None known	None known
Hydrochloric acid	7647-01-0	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h
Phenol	108-95-2	= 317 mg/kg (Rat) = 340 mg/kg (Rat)	= 630 mg/kg (Rabbit)	= 316 mg/m ³ (Rat) 4 h
Buffering agent	-	> 3200 mg/kg (Rat)	None known	None known
Water	7732-18-5	> 90 mL/kg (Rat)	None known	None known

Chronic toxicity No information available

Carcinogenicity

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Indicator	-	None known	None known	None known	None known
Polyvinyl polymer	-	None known	None known	None known	None known
Hydrochloric acid	7647-01-0	None known	Group 3	None known	None known
Phenol	108-95-2	None known	Group 3	None known	None known
Buffering agent	-	None known	None known	None known	None known

Water	7732-18-5	None known	None known	None known	None known
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Endocrine Disruptor Information

Chemical name	CAS No	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine disrupting potential
Indicator	-	None known	None known	None known
Polyvinyl polymer	-	None known	None known	None known
Hydrochloric acid	7647-01-0	None known	None known	None known
Phenol	108-95-2	None known	None known	None known
Buffering agent	-	None known	None known	None known
Water	7732-18-5	None known	None known	None known

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	CAS No	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Indicator	-	None known	None known	None known	None known
Polyvinyl polymer	-	None known	None known	None known	None known
Hydrochloric acid	7647-01-0	None known	282: 96 h <i>Gambusia affinis</i> mg/L LC50 static	None known	None known
Phenol	108-95-2	0.0188 - 0.1044: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static 187 - 279: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 static 46.42: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50	11.9 - 25.3: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 11.9 - 50.5: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 20.5 - 25.6: 96 h <i>Pimephales promelas</i> mg/L LC50 static 23.4 - 36.6: 96 h <i>Oryzias latipes</i> mg/L LC50 static 33.9 - 43.3: 96 h <i>Oryzias latipes</i> mg/L LC50 flow-through 34.09 - 47.64: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 4.23 - 7.49: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static 5.0 - 12.0: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 5.449 - 6.789: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 7.5 - 14: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 0.00175: 96 h <i>Cyprinus carpio</i> mg/L LC50 semi-static 11.5: 96 h <i>Lepomis macrochirus</i> mg/L LC50 semi-static 13.5: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 27.8: 96 h <i>Brachydanio rerio</i> mg/L LC50 31: 96 h <i>Poecilia reticulata</i> mg/L LC50 semi-static 32: 96 h <i>Pimephales promelas</i> mg/L LC50	EC50 21 - 36 mg/L 30 min EC50 = 23.28 mg/L 5 min EC50 = 25.61 mg/L 15 min EC50 = 28.8 mg/L 5 min EC50 = 31.6 mg/L 15 min	10.2 - 15.5: 48 h <i>Daphnia magna</i> mg/L EC50 4.24 - 10.7: 48 h <i>Daphnia magna</i> mg/L EC50 Static
Buffering agent	-	None known	None known	None known	None known
Water	7732-18-5	None known	None known	None known	None known

Chemical name	CAS No	Log Pow
Indicator	-	None known
Polyvinyl polymer	-	None known
Hydrochloric acid	7647-01-0	None known
Phenol	108-95-2	1.47
Buffering agent	-	None known
Water	7732-18-5	None known

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose according to federal, state, and local regulations. If permitted, neutralize reagent with sodium bicarbonate/sodium carbonate, add slurry to large volume of water to dilute, rinse to drain with excess water.

Chemical name	CAS No	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Indicator	-	None known	None known	None known	None known
Polyvinyl polymer	-	None known	None known	None known	None known
Hydrochloric acid	7647-01-0	None known	None known	None known	None known
Phenol	108-95-2	None known	None known	None known	None known
Buffering agent	-	None known	None known	None known	None known
Water	7732-18-5	None known	None known	None known	None known

Chemical name	California Hazardous Waste Status
Indicator	-
Polyvinyl polymer	-
Hydrochloric acid 7647-01-0	-
Phenol 108-95-2	-
Buffering agent	-
Water 7732-18-5	-

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	CAS No	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Indicator	-	Present	X	X	ENCS	X	KECL	X	AICS
Polyvinyl polymer	-	Present	DSL	EINECS/ELINCS	ENCS	X	KECL	PICCS	AICS
Hydrochloric acid	7647-01-0	Present	X	X	Present	X	KE-20189	X	X
Phenol	108-95-2	Present	X	X	Present	X	KE-28209	X	X
Buffering agent	-	Present	X	X	Present	X	KE-02310	X	X
Water	7732-18-5	Present	X	X	ENCS	X	KE-35400	X	X

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Indicator	-	<0.1	None known
Polyvinyl polymer	-	<0.5	None known
Hydrochloric acid	7647-01-0	<0.2	1.0
Phenol	108-95-2	0.2	1.0
Buffering agent	-	1-5	None known
Water	7732-18-5	to 100%	None known

SARA 311/312 Hazard Categories

Acute health hazard Yes
 Chronic Health Hazard No
 Fire hazard No
 Sudden release of pressure hazard No

Reactive Hazard

No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CAS No	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Indicator	-	None known	None known	None known	None known
Polyvinyl polymer	-	None known	None known	None known	None known
Hydrochloric acid	7647-01-0	5000 lb	None known	None known	X
Phenol	108-95-2	1000 lb	X	X	X
Buffering agent	-	None known	None known	None known	None known
Water	7732-18-5	None known	None known	None known	None known

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:.

Chemical name	CAS No	Weight-%	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Indicator	-	<0.1	None known	None known	None known	None known
Polyvinyl polymer	-	<0.5	None known	None known	None known	None known
Hydrochloric acid	7647-01-0	<0.2	Present	None known	None known	None known
Phenol	108-95-2	0.2	Present	Group III	None known	None known
Buffering agent	-	1-5	None known	None known	None known	None known
Water	7732-18-5	to 100%	None known	None known	None known	None known

CERCLA

Chemical name	CAS No	Hazardous Substances RQs	CERCLA/SARA RQ
Indicator	-	None known	None known
Polyvinyl polymer	-	None known	None known
Hydrochloric acid	7647-01-0	5000 lb	5000 lb
Phenol	108-95-2	1000 lb	1000 lb
Buffering agent	-	None known	None known
Water	7732-18-5	None known	None known

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

Chemical name	CAS No	California Proposition 65
Indicator	-	None known
Polyvinyl polymer	-	None known
Hydrochloric acid	7647-01-0	None known
Phenol	108-95-2	None known
Buffering agent	-	None known
Water	7732-18-5	None known

U.S. State Right-to-Know Regulations

Chemical name	CAS No	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Indicator	-	None known	None known	None known	None known	None known
Polyvinyl polymer	-	None known	None known	None known	None known	None known
Hydrochloric acid	7647-01-0	X	X	X	X	X
Phenol	108-95-2	X	X	X	X	X
Buffering agent	-	None known	None known	None known	None known	None known
Water	7732-18-5	None known	None known	X	None known	None known

International Regulations**Mexico - Grade**

Chemical name	CAS No	Carcinogen Status	Exposure Limits
Indicator	-	None known	None known

Polyvinyl polymer	-	None known	None known
Hydrochloric acid	7647-01-0	None known	None known
Phenol	108-95-2	None known	Mexico: TWA 5 ppm Mexico: TWA 19 mg/m ³ Mexico: STEL 10 ppm Mexico: STEL 38 mg/m ³
Buffering agent	-	None known	None known
Water	7732-18-5	None known	None known

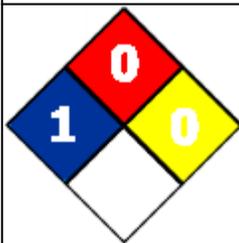
Canada

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

Component	CAS No	WHMIS Hazard Class
Indicator (<0.1)	-	Uncontrolled product according to WHMIS classification criteria
Polyvinyl polymer (<0.5)	-	Not Determined
Hydrochloric acid 7647-01-0 (<0.2)	7647-01-0	1 % A,D1A,E D1A,E E D1B,E
Phenol 108-95-2 (0.2)	108-95-2	1 % D1A,E
Buffering agent (1-5)	-	Uncontrolled product according to WHMIS classification criteria
Water 7732-18-5 (to 100%)	7732-18-5	Uncontrolled product according to WHMIS classification criteria

Chemical name	CAS No	NPRI
Indicator	-	
Polyvinyl polymer	-	
Hydrochloric acid	7647-01-0	
Phenol	108-95-2	X
Buffering agent	-	
Water	7732-18-5	

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td>1</td> </tr> <tr> <td>Fire Hazard</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	0		
Health Hazard	1								
Fire Hazard	0								
Reactivity	0								

Prepared by Regulatory Affairs Department
 Issuing Date Apr-11-2012
 Revision Date May-11-2015
 Revision note MSDS was reviewed per Canada request - Canada requires MSDS to be dated within 3 years of the request.

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Material Safety Data Sheet