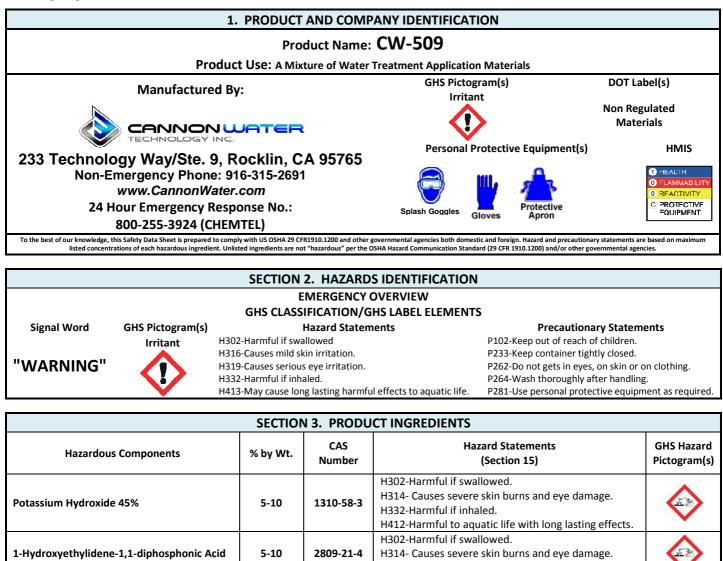
### CW-509



1-Hydroxyethylidene-1,1-diphosphonic Acid	5-10	2809-21-4	H314- Causes severe skin burns and eye damage. H332-Harmful if inhaled.	
Polymaleic Acid based Polymeric	5-10	26099-09-2 H302-Harmful if swallowed.   H314- Causes severe skin burns and eye damage.   H332-Harmful if inhaled.   H412-Harmful to aquatic life with long lasting effects.		
Non Hazardous Ingredient	70-85			
Total	100			

	SECTION 4. FIRST AID MEASURES
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If breathing difficult, give oxygen. Call a physician if any difficulties persist.
Eyes:	Flush eyes with a large amount of water for 15 minutes. Seek medical attention immediately if any irritation persists. After first aid, get appropriate in-plant, paramedic or community medical support.
Skin:	Wash affected areas thoroughly with soap and water for at least 15 minutes. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Seek medical attention if any irritation persists.
Ingestion	If person can swallow, give 2 glasses of water to drink. DO NOT INDUCE VOMITING! After first aid, seek appropriate in-plant, paramedic, or community medical support. Never give anything by mouth to an unconscious person. After first aid, get appropriate in-plant, paramedic, or community medical support.

## SECTION 5. FIRE FIGHTING MEASURES

Flammability Classification:	Non Flammable	
Suitable Extinguishing Media:	Water fog, Alcohol foam, Carbon Dioxide, Dry Chemical	
Unusual Fire or Explosion Hazards:	None known other than material can splatter above 100°C/212°F.	
Hazardous Combustion Products:	Unknown but carbon monoxide may be released on burning.	
Fire-Fighting Instructions:	Do not release runoff from fire control methods to sewers or waterways.	
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Fire-Fighting Equipment:

Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

#### **SECTION 6. ACCIDENTIAL RELEASE MEASURES**

Personal Precautions:	Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
Small Spills:	Absorb spill with paper towel or similar absorbent; or flush to sewer or ground with large amounts of water.
Large Spills:	For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways. Absorb spill
Containment:	with vermiculite, oil dry or similar non-reactant absorbent. Solidified product represents no environmental hazard.
Cleanup:	Accumulate the absorbed materials and dispose of according to federal, state and local regulations.
Environmental	Follow applicable OSHA/CERCLA or any other regulations (29 CFR 1910.120) as well as any state or local regulations that
Precautions:	may apply.

#### **SECTION 7. HANDLING AND STORAGE**

Precautions for	Use the recommended safety controls and personal protective equipment as outlined. Fully review all data before handling of
safe handling:	the material itself. Avoid contact with skin or eyes. Avoid breathing dust or mist. Keep from contact with clothing and other combustible materials. Observe good personal hygiene and housekeeping practices. Wash thoroughly after handling.
Conditions for	Do not store in direct sunlight. Store in a tightly closed container. Store in a cool dry, well ventilated area. Do not store this
safe Storage:	material near any strong acids, bases, oxidizers, flammables or any other type of reactive material. Do not expose the material to temperature extremes. Do not store product above 77°F.
Regulatory	Store materials according to all local, state and federal guidelines that are established for non-regulated chemical products.
Requirements:	

	SECTION 8. EX	XPOSURE CONTRO	LS/PERSONAL PROTE	CTION	
			uire monitoring at the wo		
Hazardous Components		CAS Number	OSHA PEL/TWA STEL	ACGIH TLV/TWA STEL	Other
Potassium Hydroxide 45%		1310-58-3	2 mg/m3	2 mg/m3	
1-Hydroxyethylidene-1,1-o	diphosphonic Acid	2809-21-4	None Est.	None Est.	
Polymaleic Acid based Polymaleic Acid based Polymaleic Acid based Polymaleic Acid based Polymaleic Polymaleic Acid based Polymaleic	ymeric	26099-09-2	None Est.	None Est.	
		Engineering	Controls:		
Ventilation:	Provide general or local	exhaust ventilation sy	stems to maintain airborne	concentrations below OSHA	PELs (Sec. 2).
	Local exhaust ventilation	n is preferred because	it prevents contaminant di	spersion into the work area b	y controlling it
	at its source.				
Respiratory Protection:	•	•		HA respirator regulations (29	,
				rator based on its suitability t	•
	adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient				
	oxygen. For emergency or non-routine operations (cleaning spills, reactor vessel, or storage tanks), wear an SCBA.				
	Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used,				
	•			least: medical certification, tra	0.
	0.1	nmental monitoring, m	aintenance, inspection, cle	aning, and convenient, sanita	ry storage
	areas.				(22.052
Personal Protective	Wear protective eyeglasses or chemical safety goggles, per OSHA eye-and face-protection regulations (29 CFR				
Equipment (PPE):	1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in				
	conjunction with contact lenses. At a minimum wear safety glasses with side shields as well as chemically protective				
	gloves and aprons to prevent prolonged or repeated skin contact.				
Safety Stations:	Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.				
Contaminated	Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.				
Equipment: Comments:	shoes and clean personal protective equipment. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before				
comments:	eating, drinking, smokin			e arter using this material, esp	Jecially before
Work/Hygienic Practices	0, 0,	0. 0		ential in preventing injuries or	rirritation
work nyglenic Flactices	Consistent use of alore-	mentioneu personal p	i otective equipment is essi	ential in preventing injuries of	initiation.

	SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES				
Form:	Liquid	Appearance:	Light amber color	Odor:	Characteristic odor
pH:	10-12	Vapor Pressure:	Same as water	Flammability:	Non Flammable
Specific Gravity:	1.07+/-	Vapor Density:	Same as water	Flash Point:	NIA
Water Solubility:	Complete	Evaporation Rate:	1.00	Auto Ignition Temp:	NIA
Other Solubilities:	Not Determined	Melting Point:	NA	LEL:	Not Determined
% Volatile:	85%	Freeze Point:	Approx. 32°F	UEL:	Not Determined
Boiling Point:	212°F+/-	Decomposition Temp:	Not Determined		

#### SECTION 10. STABILITY AND REACTIVITY

Conditions to Avoid: Hazardous Polymerization: Chemical Incompatibilities: Hazardous Decomposition Products: However, avoid temperature extremes. Excessive temperature, contact with any type of reactive chemicals Hazardous polymerization will not occur. Avoid contact with Strong Acids, Strong Alkalis, Oxidizers or any other type of reactive material. There are no known hazardous decomposition products for this material unless the material is burned in which case undetermined evolution of toxic gases may occur.

SECTION 11. TOXICOLOGICAL INFORMATION				
Hazardous Components	CAS No.:	LD50 of Ingredient (Specify Species & Route)	LD50 Dermal of Ingredient (Specify Species)	
Potassium Hydroxide 45%	1310-58-3	365mg/kg Oral Rat	Corrosive	
1-Hydroxyethylidene-1,1-diphosphonic Acid	2809-21-4 2400mg/kg Oral Rat Irritant 1800mg/kg Oral Mouse			
Polymaleic Acid based Polymeric	26099-09-2	15000mg/kg Oral Rat LC50-6.5mg/kg 1/6hr Rat	>5010mg/kg Rabbit	
Primary Irritant Effects:				
Routes of Entry:	Absorbed through skin, Dermal Contact, Eye Contact, Inhalation.			
Eye Effects:	Irritation to eyes & possible burning if materials are not immediately rinsed from the eye.			
Acute Inhalation Effects:	Might produce irritation to respiratory system.			
Skin Effects:	Irritation to skin.			
Acute Oral/Ingestion Effects:	Not tested for this blend. Harmful if swallowed.			
Chronic Effects on Humans:	No specific studies have been conducted for this specific blend.			
Other Toxic Effects on Humans:	No specific studies have been conducted for this specific blend.			
Special Remarks- Human Chronic Effects:	No other information for chronic effects on humans.			
Carcinogenity:	IARC, NTP, and OSHA do not list this product or its components as a carcinogen.			
Mutagenicity:	No mutagenic effects are known to be applicable for the formulation components of this product.			
Teratogenicity:	No studies have been performed for this specific product blend.			
Target Organ Statement:	No studies have been conducted for this specific product blend.			

SECTION 12. ECOLOGICAL INFORMATION			
Hazardous Components	CAS No.:	LC:50	EC:50
Potassium Hydroxide 45%	1310-58-3	80mg/l 48hr Daphnia Magna 179mg/l 96hr Fathead Minnow	60mg/l 48hr Daphnia Magna 61mg/l 96hr Algae
1-Hydroxyethylidene-1,1-diphosphonic Acid	2809-21-4	>300mg/l 96hr Fish	>500mg/l 48hr Daphnia Magna IC50=300mg/l 72hr Algae
Polymaleic Acid based Polymeric	26099-09-2	3.8 mg/l 96hr Lepomis Macrochirus	19mg/l 48h Daphnia Magna EC50 - 0.3mg/l 96hr Algae
Special Remarks-Products of biodegradation:	: The Component(s) of this product are not subject to rapid biodegradation.		

	SECTION 13. WASTE DISPOSAL CONSIDERATIONS
Disposal Regulatory Requirements:	Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable federal, state and local regulations.
Container Cleaning and Disposal:	Triple rinse the empty containers with water before disposal to reconditioned or land fill or garbage.

SECTION 14. TRANSPORTATION INFORMATION					
Proper Shipping Name:	NON REGULATED MA	TERIALS			DOT Shipping Label(s):
Contains:					
Hazard Class:	Marine Pollutant	UN Number:	Packing Group:	ERG Number:	None
Non Hazardous	No	NA	NA	NA	None
Special Shipping Notations:	None				
Note: Transportation information	provided is for reference o	nly. Client is urged to co	nsult CFR 49, Parts 100-177,	IMDG, IATA, EU, United	Nations, TDG and WHMIS
(Canada) TDG information manual	s for detailed regulations a	nd exceptions covering	specific container sizes, pack	aging materials and met	hods of shipping.

### **15. REGULATORY INFORMATION**

Hazard Symbol(s):	
Hazard Statements:	H302-Harmful if swallowed.
	H316-Causes mild skin irritation.
	H319-Causes serious eye irritation
	H332-Harmful if inhaled.
	H413-May cause long lasting harmful effects to aquatic life.
<b>Precautionary Statements:</b>	P102+P103-Keep out of reach of children. Read label before use.

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P233+P234-Keep container tightly closed. Keep only in original container.		
P262-Do not get in eyes, on skin, or on clothing.		
P264-Wash thoroughly after handling.		
P270-Do not eat, drink or smoke when using this product.		
P281-Use personal protective equipment as required.		
P301+330+331- If swallowed, rinse mouth. Do not induce vomiting.		
P304+P341- IF inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.		
P305+P351+P338-IF in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present.		
	EPA	Regulations:
RCRA Hazardous Waste Number:		Product blend is not listed (40 CFR 261.33)
RCRA Hazardous Waste Classification (40 CFR 261.):		Product blend is not classified.
CERCLA Hazardous Substance (40 CFR 302.4):		Product blend is unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)
		(4); CWA, Sec. 307 (a),
CAA, Sec. 112 CERCLA Reportable Quantity (RQ):		Contains: Potassium Hydroxide 1,000 lb
SARA 313 Codes: This pr	oduct may be subject to the reporting	
requirements of section 313 of the Emergency Planning and		Not listed
Community Right to Know Act of 1986 and 40CFR372.		
SARA Toxic Chemical (40CFR 372.65):		Not listed
Sara 302/304 Extremely Hazardous Substance (40CFR 355)		Not listed
Sara 313 SARA EHS (Extremely Hazardous Substance) (40 CFR 355):		Not listed
Threshold Planning Quantity (TPQ):		Not listed
<b>OSHA Regulations:</b>		
Air Contaminant (20 CFR 1910.1000, Table Z-1, Z-1-A):		Not listed.
OSHA Specifically Regulated Substance (29 CFR 1910.):		Not Listed
State Regulations:	As a product blend, the materials are generally not listed. Check with your local state regulatory board for more detailed information regarding the specific components of this product.	
National Regulations:	All components of this product are listed in the U.S. Environmental Protection Agencies, Toxic Substance Control Act (TSCA) Chemical Substance Inventory.	

### **SECTION 16. OTHER INFORMATION**

#### SDS Prepared/Reviewed By: R. Cannon

Date of Preparation:

1/2016

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