



MATERIAL SAFETY DATA SHEET

SECTION 1 - MANUFACTURER OR SUPPLIER DATA

MANUFACTURER'S NAME & MAILING ADDRESS Aqua Systems, Inc. P.O. BOX 397 Arroyo Grande, CA 93421	PREPARED BY Dana A. Nafziger	SIGNATURE 	MSDS NUMBER
	TITLE Safety Supervisor	DATE 7-15-99	EMERGENCY TELEPHONE NO. (24 HOUR SERVICE) 800-535-5053
PRODUCT INFORMATION TELEPHONE NO. (8-5 PST) 805-489-9250			

SECTION 2 - IDENTITY OF MATERIAL

PRODUCT NAME AQUA CHLOR 12.5		
PRODUCT DESCRIPTION Sodium Hypochlorite	FORMULA NaOCL	CHEMICAL FAMILY
REGULATED IDENTIFICATION	DOT PROPER SHIPPING NAME Hypochlorite Solution	HAZARD CLASS Corrosive Material
	SHIPPING ID NUMBER UN 1791	

SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT 219° Degrees F	SPECIFIC GRAVITY 1.224 @ 20° F	PHYSICAL FORM Liquid	COLOR Light Yellow
VAPOR PRESSURE (mm Hg) N/A	MELTING POINT NA	SOLUBILITY IN WATER Complete	SCENT Chlorine
VAPOR DENSITY (AIR = 1) N/A	EVAPORATION RATE (BUTYL ACETATE = 1) NA	pH 2500 ppm SOLUTION	pH CONCENTRATE 6
OTHER			

SECTION 4 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS (CHEMICAL NAME: COMMON NAME)	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	PERCENT
Sodium Hydroxide	N/A	N/A		12.50%

NFPA RATING:
NOT RATED

HMIS RATING:

CARCINOGENICITY:
NTP - NO, IARC - NO, OSHA - NO

(CONTINUED ON REVERSE SIDE)

SECTION 5 - SAFE USAGE DATA

PROTECTIVE EQUIPMENT TYPES	EYES Use chemical goggles and face shield.	
	RESPIRATORY Yes	GLOVES Rubber or neoprene gloves.
	OTHER AS need to avoid contact with skin and eyes. Eyewash Fountain.	
VENTILATION	GENERAL MECHANICAL	
	LOCAL EXHAUST Local exhaust is recommended.	
PRECAUTIONS	HANDLING & STORAGE Store in cool, well ventilated areas. Keep containers tightly closed when not in use. Avoid	
	contact with skin and eyes.	

SECTION 6 - HEALTH HAZARD DATA

EFFECTS OF EXPOSURE	INHALATION Fumes from spills are very irritating to mucous membranes.	
	INGESTION Causes irritation of membranes of the mouth, throat, and stomach pain and possible ulceration.	
	SKIN & EYES Can cause damage, chemical burns.	
	ACUTE & CHRONIC Seek Medical Aid.	
ROUTES OF ENTRY	<input checked="" type="checkbox"/> INGESTION <input checked="" type="checkbox"/> SKIN <input checked="" type="checkbox"/> SKIN ABSORPTION <input checked="" type="checkbox"/> EYES <input checked="" type="checkbox"/> INHALATION	TARGET ORGANS

SECTION 7 - PHYSICAL HAZARD DATA

FLAMMABILITY	LEL =	FLASH POINT	METHOD USED
	UEL =	N/A	
STABILITY	<input type="checkbox"/> STABLE	CONDITIONS TO AVOID Solutions are fairly stable in concentrations below 10 %.	
	<input type="checkbox"/> UNSTABLE	HAZARDOUS DECOMPOSITION PRODUCTS Hypochlorous Acid (HOCL), Chlorine, Hydrochloric acid.	
HAZARDOUS POLYMERIZATION	<input type="checkbox"/> MAY OCCUR	CONDITIONS TO AVOID	
	<input checked="" type="checkbox"/> WILL NOT OCCUR		
INCOMPATIBILITY	MATERIALS TO AVOID Acids, Alcohols, Amines, Ammonia, Chlorinated isocyanurates, Ethers		

SECTION 8 - EMERGENCY RESPONSE DATA

FIRE	EXTINGUISHING MEDIA Flood with water or carbon dioxide (CO2)
	SPECIAL PROCEDURES Use NIOSH approved respirator with acid type canister or self-contained breathing apparatus.
	UNUSUAL HAZARDS Material is a strong oxidizer. Contact with combustibles may initiate or promote combustion.
FIRST AID MEASURES	INGESTION: Drink large quantities of milk, or gelatin solution or if not available drink large quantities of Water. DO NOT give vinegar or other acids. DO NOT induce vomiting. Get prompt medical attention.
	SKIN: Wash with plenty of soap and water for at least fifteen minutes. Get prompt medical attention.
	EYES: Flush with water for at least fifteen minutes. Get prompt medical attention.
SPILLS	STEPS TO BE TAKEN Cleanup personnel must wear proper protective equipment.
RO =	Contain in diked area. Neutralize with sodium bisulfite or ferrous salt solutions. Place neutralized
	material in DOT specification approved container(s). Flush area with large amounts of water. Comply
	with all Federal, State and local reporting requirements.

THE DATA IN THIS MATERIAL SAFETY DATA SHEET RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND DOES NOT RELATE TO ITS USE IN COMBINATION WITH ANY OTHER MATERIAL OR PROCESS. THE DATA CONTAINED IS BELIEVED TO BE ACCURATE. HOWEVER, SINCE USE CONDITIONS VARY AND ARE OUTSIDE OUR CONTROL, AQUA SYSTEMS, INC. MAKES NO WARRANTIES, EXPRESS OR IMPLIED AND ASSUMES NO LIABILITY FOR FAILURE TO FOLLOW PRODUCT USE DIRECTION AND SAFETY PRECAUTIONS.