

U.S. DEPARTMENT OF LABOR
WORKPLACE STANDARDS ADMINISTRATION
 Bureau of Labor Standards

*SWIMMING
 Pool*

MATERIAL SAFETY DATA SHEET

SECTION I	
MANUFACTURER'S NAME Monarch Chemicals, Inc.	EMERGENCY TELEPHONE NO. 315-732-6151
ADDRESS (Number, Street, City, State, and ZIP Code) 37 Meadow St. Box 176 - Utica, NY 13503	
CHEMICAL NAME AND SYNONYMS Sodium Hypochlorite	TRADE NAME AND SYNONYMS MONO-CHLOR
CHEMICAL FAMILY Alkaline Oxidizing Agent	FORMULA NaOCl - 5.25%, 8.0%, 12.0% (By weight)

SECTION II HAZARDOUS INGREDIENTS					
PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
Not Applicable (N.A.)					

SECTION III PHYSICAL DATA			
BOILING POINT (°F.)	N.A.	SPECIFIC GRAVITY (H ₂ O=1) 20°C	7.25% - 1.09 8.0% - 1.15 12.0% - 1.20
VAPOR PRESSURE (mm Hg.)	N.A.	PERCENT VOLATILE BY VOLUME (%)	N.A.
VAPOR DENSITY (AIR=1)	N.A.	EVAPORATION RATE (ether=1)	less than 1
SOLUBILITY IN WATER	- solutions complete		
APPEARANCE AND ODOR	Light straw yellow to greenish tint. Slight Cl ₂ odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA			
FLASH POINT (Method used)	Non flammable	FLAMMABLE LIMITS	Lel Uel
EXTINGUISHING MEDIA	N.A.		
SPECIAL FIRE FIGHTING PROCEDURES Use of water to keep solution cool and dilute product if a leak does occur.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Heat would cause decomposition of sodium hypochlorite with evolution of Cl ₂ gas.			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE None established

EFFECTS OF OVEREXPOSURE Irritating to skin, eyes, and mucous membranes

EMERGENCY AND FIRST AID PROCEDURES Eye contact requires immediate and thorough flushing with copious quantities of water for at least 15 minutes. A physician should be contacted. Do not use a neutralizing chemical as a substitute for water. Skin contact requires immediate washing.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE	X	CONDITIONS TO AVOID High temperatures, exposure to light, traces of catalytic metals (nickel, copper, iron, cobalt, magnesium), excess alkalinity.
	STABLE		
INCOMPATIBILITY (MATERIALS TO AVOID) Acidic solutions or readily reducible materials			
HAZARDOUS DECOMPOSITION PRODUCTS Cl ₂			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID -
	WILL NOT OCCUR	X	-

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Contain if possible. Dilute or wash down with large quantities of water. Keep to windward when exposed to fumes.

WASTE DISPOSAL METHOD
Dilute as above before disposal. If permitted by regulation, flush diluted sodium hypochlorite to sewer with plenty of water.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE) None required		
VENTILATION	LOCAL EXHAUST Sufficient to eliminate fumes	SPECIAL
	MECHANICAL (GENERAL)	OTHER.
PROTECTIVE GLOVES	Rubber	EYE PROTECTION Chemical safety goggles or face shield
OTHER PROTECTIVE EQUIPMENT Clothing impermeable to sodium hypochlorite. Rubber footwear.		

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Most metals are rapidly attacked by sodium hypochlorite. Store in well-ventilated, cool, dark area. UV light should be excluded during storage. Vented caps should be used.

OTHER PRECAUTIONS