



I - PRODUCT IDENTIFICATION AND USE				MSDS ID: 0454
PRODUCT NAME: MACHINE DISH LIQUID L1				
USE: Machine Warewashing Detergent				
SUPPLIER: JohnsonDiversey Canada, Inc. 2401 Bristol Circle Oakville Ontario, L6H 6P1, Canada			EMERGENCY PHONE: 1-800-668-7171	
WHMIS CLASSIFICATION: D2B E CHEMICAL FAMILY: Chlorinated Alkali			TRADE NAME / SYNONYMS: not applicable CHEMICAL NAME: not applicable	
II - HAZARDOUS INGREDIENTS				
HAZARDOUS INGREDIENT	% w/w	CAS #	LD50 / LC50	Route / Species
Potassium hydroxide	10-30	001310-58-3	LD50 273 mg/kg	oral/rat
Sodium hypochlorite (10.5%-solution)	15-40	007681-52-9	LD50 4445 mg/kg	oral/rat
III - HANDLING AND DISPOSAL PROCEDURES				
PERSONAL PROTECTIVE EQUIPMENT:				
Gloves: Natural rubber, Neoprene or Nitrile		Eye: safety goggles		Footwear: not required
Respiratory: If mists are generated, use NIOSH approved mask			Other: not required	
SPECIAL HANDLING PROCEDURES AND EQUIPMENT: Avoid eye and skin contact.				
VENTILATION REQUIREMENTS: General ventilation.				
INCOMPATIBILITY (Material to Avoid): Acids, ammonia, urea, amines.				
SPILL PROCEDURES: Wear protective clothing. Contain the spill. Do not allow the spilled product to go to drain. Mop up or soak up with absorbent clay for disposal. Wash spill area with large volumes of water.				
WASTE DISPOSAL: Dispose according to municipal, provincial, and federal regulations.				
STORAGE / SHIPPING REQUIREMENT: Store in a cool dry area in a closed container. UN3266				
IV - PHYSICAL PROPERTIES				
APPEARANCE / ODOUR: Clear pale yellow liquid - chlorine odour				
S.G. / BULK DENSITY(g/cc): 1.26		pH: 13.5		
VAPOUR PRESSURE (mmHg): not available		VAPOUR DENSITY (air=1): not available		
ODOUR THRESHOLD: 0.2-0.4 ppm chlorine		BOILING POINT: approx. 100°C		
FREEZING POINT: approx. -10°C		PERCENT VOLATILE: approx. 75%		
SOLUBILITY IN WATER: soluble		EVAPORATION RATE (water=1): 1		
V - TOXICOLOGICAL PROPERTIES				
EFFECTS OF ACUTE EXPOSURE TO MATERIAL:				
EYES: Corrosive. May cause severe irritation. May cause permanent damage if not treated promptly.				
SKIN: Corrosive. May cause severe irritation. May cause permanent damage if not treated promptly.				
INGESTION: Corrosive. May cause severe irritation of the digestive tract. May cause permanent damage if not treated promptly.				
INHALATION: Corrosive. Inhalation of spray or mist may cause severe respiratory irritation.				
LD50 (calculated): LD50 1608 mg/kg			LC50 (calculated): not applicable	

OTHER TOXIC EFFECTS: TLV-CL (Potassium hydroxide): 2 mg/m3; (Sodium hypochlorite) -TWA 0.5 ppm; -STEL 1 ppm

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL: none known

VI - FIRST AID MEASURES

EYES: Flush eyes with plenty of water for at least 15 minutes. Hold eyelids open while rinsing. Contact a physician immediately.
SKIN: Flush affected area thoroughly with water. If irritation develops, contact a physician.
INGESTION: Drink large volumes of water. Never give anything by mouth to an unconscious patient. Do not induce vomiting. Contact a physician immediately.
INHALATION: Remove patient to fresh air. Get medical attention for any breathing difficulty.

VII - FIRE AND EXPLOSION DATA

FLAMMABLE: No

FLASH POINT, °C: not applicable **AUTO IGNITION TEMPERATURE, °C:** N/Ap

EXTINGUISHING MEDIA: Water [x] Dry Chemical [x] Carbon Dioxide [x] Foam [x] Other []

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus.

HAZARDOUS COMBUSTION PRODUCTS: Chlorine gas and oxygen released when heated.

EXPLOSIVE SENSITIVITY TO: not applicable

VIII - REACTIVITY DATA

STABILITY: Stable [] Unstable [x]

CONDITIONS TO AVOID: Chlorine loss accelerated at high temperature and when exposed to light.

INCOMPATIBILITY (Material to Avoid) : Acids, ammonia, urea, amines.

HAZARDOUS DECOMPOSITION PRODUCTS: Contact with acid generates heat and chlorine gas. Contact with ammonia, urea and amines produces nitrogen gas and chloramines.

REACTIVITY: not dangerously reactive

IX - MSDS PREPARATION

SOURCES USED: RTECS, ChemInfo

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