



I - PRODUCT IDENTIFICATION AND USE

MSDS ID: 0402

PRODUCT NAME: LEVER CLEAN CHLORINATED DETERGENT**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	7-13	001310-58-3	LD50 273 mg/kg	oral/rat
Sodium hypochlorite (10.5%-solution)	7-13	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.

IV - PHYSICAL PROPERTIES

APPEARANCE / ODOUR: Clear pale yellow liquid - chlorine odour**S.G. / BULK DENSITY(g/cc):** 1.27**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. 89%**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 2632 mg/kg**LC50 (calculated):** not applicable

OTHER TOXIC EFFECTS: TLV-CL (potassium hydroxide) 2 mg/m3; TLV-TWA (Cl2) 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	PREPARED BY: JohnsonDiversey Canada, Inc. Regulatory Department Institutional Division Phone (905) 829-1200
PREPARATION DATE: April 15, 2003	
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