



## I - PRODUCT IDENTIFICATION AND USE

PRODUCT NAME: **LEVER CLEAN HARD WATER DETERGENT**

USE: Machine Warewashing Detergent

## SUPPLIER:

DiverseyLever Canada  
division of U L Canada Inc.  
2401 Bristol Circle  
Oakville Ontario, L6H 6P1, Canada

## EMERGENCY PHONE

1-800-668-7171

WHMIS CLASSIFICATION: D2B E

CHEMICAL FAMILY: caustic alkali

TRADE NAME / SYNONYMS: not applicable

CHEMICAL NAME: not applicable

## II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENT	% w/w	CAS #	LD50 / LC50	Route / Species
Sodium hydroxide	7-13	001310-73-2	LDLo 500 mg/kg	oral/rat
Sodium nitrilotriacetate	10-30	005064-31-3	LD50 1100 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: rubber apron as required

SPECIAL HANDLING PROCEDURES AND EQUIPMENT: Avoid eye and skin contact.

VENTILATION REQUIREMENTS: General ventilation

INCOMPATIBILITY (Material to Avoid): acids, aluminum, zinc

SPILL PROCEDURES: 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 liquid

S.G. / BULK DENSITY(g/cc): 1.28

pH: 13.5

VAPOUR PRESSURE (mmHg): not available

VAPOUR DENSITY (air=1): not available

ODOUR THRESHOLD: not applicable

BOILING POINT: approx. 100°C

FREEZING POINT: approx. -10°C

PERCENT VOLATILE: 67%

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 temporary or 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 2500 mg/kg

**LC50 (calculated):** not applicable

**OTHER TOXIC EFFECTS:** TLV-CL (sodium hydroxide) 2 mg/m<sup>3</sup>

**EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:** This product contains NTA. In laboratory tests, rats and mice continuously fed highly exaggerated doses of NTA showed evidence of urinary tract (bladder and kidney) toxicity, including cancer; lower doses showed none of these toxic effects. By ACGIH guidelines, NTA would not be considered an occupational (human) carcinogen or any practical significance.

### 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:** Oxides of carbon, nitrogen.

**EXPLOSIVE SENSITIVITY TO:** not applicable

### VIII - REACTIVITY DATA

**STABILITY:** Stable [x] Unstable []

**CONDITIONS TO AVOID:** not applicable

**INCOMPATIBILITY (Material to Avoid):** acids, aluminum, zinc

**HAZARDOUS DECOMPOSITION PRODUCTS:** Heat released on contact with acids. Contact with aluminum or zinc generates hydrogen gas.

**REACTIVITY:** not dangerously reactive

### IX - MSDS PREPARATION

**SOURCES USED:** RTECS, Cheminfo

**PREPARED BY:** DiverseyLever Canada  
Research and Development Department  
Institutional Division  
Phone (905) 829-1200

**PREPARATION DATE:** April 15, 2000

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