



I - PRODUCT IDENTIFICATION AND USE

MSDS ID: 8522219

PRODUCT NAME: CHALLENGE

USE: A non foaming, chlorinated alkaline C.I.P. cleaner

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
Sodium hydroxide	10-30	001310-73-2	LDLo 500 mg/kg	oral/rab
Sodium hypochlorite	1-5	007681-52-9	LD50 375 mg/kg	oral/rat

III - HANDLING AND DISPOSAL PROCEDURES

PERSONAL PROTECTIVE EQUIPMENT:

Gloves: Natural Rubber, Neoprene or Nitrile **Eye:** Safety goggles **Footwear:** As required
Respiratory: If mists are generated, use NIOSH approved mask **Other:** Rubber apron

SPECIAL HANDLING PROCEDURES AND EQUIPMENT: Avoid eye and skin contact. Do not breathe mist, spray or vapours.**VENTILATION REQUIREMENTS:** Mechanical exhaust**INCOMPATIBILITY (Material to Avoid):** Acids, reducing agents, ammonia and amines, soft metals**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. UN1824 (UN3266 bulk)

IV - PHYSICAL PROPERTIES

APPEARANCE / ODOUR: Clear, yellow liquid - chlorine odour**S.G. / BULK DENSITY(g/cc):** 1.17**pH:** (concentrate): 13.2**VAPOUR PRESSURE (mmHg):** not applicable**VAPOUR DENSITY (air=1):** not applicable**ODOUR THRESHOLD:** not available**BOILING POINT:** approx. 100°C**FREEZING POINT:** not available**PERCENT VOLATILE:** 85%**SOLUBILITY IN WATER:** soluble**EVAPORATION RATE (water=1):** not applicable

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 temporary or permanent damage if not treated promptly.**INHALATION:** Corrosive. Inhalation of spray or mist may cause irritation of the respiratory tract.**LD50 (calculated):** 3788 mg/kg**LC50 (calculated):** not available

OTHER TOXIC EFFECTS: TWA 0.5 ppm Cl ₂ , STEL 1 ppm Cl ₂ (Sodium hypochlorite); TLV: TWA 2 mg/m ³ (Sodium Hydroxide)	
EFFECTS OF CHRONIC EXPOSURE TO MATERIAL: not available	
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: When heated chlorine gas is generated.	
EXPLOSIVE SENSITIVITY TO: not applicable	
VIII - REACTIVITY DATA	
STABILITY: Stable [x] Unstable []	
CONDITIONS TO AVOID: Chlorine loss accelerated at high temperatures and when exposed to light.	
INCOMPATIBILITY (Material to Avoid) : Acids, reducing agents, amines and ammonia, soft metals	
HAZARDOUS DECOMPOSITION PRODUCTS:	Contact with acids will produce heat and release chlorine gas. Reducing agents can generate heat releasing chlorine. Contact with ammonia and nitrogen containing compounds can produce nitrogen gas and chloramines. Contact with soft metals forms flammable hydrogen gas.
REACTIVITY: Not applicable	
IX - MSDS PREPARATION	
SOURCES USED: RTECS	PREPARED BY: JohnsonDiversey Canada, Inc. Regulatory Department Food Division Phone (905) 829-1200
PREPARATION DATE: April 15, 2003	
Information on this form is furnished in compliance with the Regulations respecting Controlled Products under the Hazardous Products Act and is not to be used for any other purpose, nor is it to be reproduced or published. JohnsonDiversey Canada assumes no responsibility for injury to any person or property resulting from any use of the material if reasonable safety procedures are not adhered to. In addition, JohnsonDiversey Canada assumes no responsibility for injury to any person or property resulting from any abnormal use or theft of the material, even if reasonable safety procedures are followed. Each user assumes the risk in his use of the material and should review the data and recommendations in the specific context of the intended use.	