



I - PRODUCT IDENTIFICATION AND USE

MSDS ID: N0495

PRODUCT NAME: **FORMULA 104**

USE: Chlorinated alkaline foam 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
Potassium hydroxide	5-10	001310-58-3	LD50 365 mg/kg	oral/rat
Tetradecyldimethylamine oxide	1-5	003332-27-2	LD50 >1000 mg/kg	oral/rat
Sodium hypochlorite	1-5	007681-52-9	not available	n/a

III - HANDLING AND DISPOSAL PROCEDURES

PERSONAL PROTECTIVE EQUIPMENT:

Gloves: Natural Rubber, Neoprene, Nitrile

Eye: safety goggles

Footwear: as required

Respiratory: If mists are generated, use NIOSH approved mask

Other: rubber apron

SPECIAL HANDLING PROCEDURES AND EQUIPMENT: Do not breathe mist or spray. Avoid eye contact.

VENTILATION REQUIREMENTS: mechanical exhaust

INCOMPATIBILITY (Material to Avoid): Acids, reducing agents, ammonia and amines.

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, yellow liquid, chlorine odour

S.G. / BULK DENSITY(g/cc): 1.18

pH: > 13.0

VAPOUR PRESSURE (mmHg): 17.5 @ 20°C

VAPOUR DENSITY (air=1): not applicable

ODOUR THRESHOLD: not available

BOILING POINT: approx. 100°C

FREEZING POINT: not available

PERCENT VOLATILE: 81%

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.

INGESTION: Corrosive. May cause severe irritation of the digestive tract. May cause temporary or permanent damage if not treated promptly.

INHALATION: Inhalation of spray or mist may cause irritation of respiratory tract.

LD50 (calculated): 2648 mg/kg		LC50 (calculated): not available	
OTHER TOXIC EFFECTS: TLV: (Potassium hydroxide) CL 2 mg/m3: (Cl2) TWA 0.5 ppm, STEL 1 ppm.			
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: Chlorine gas may be released when heated. Oxides of carbon, nitrogen.			
EXPLOSIVE SENSITIVITY TO: not applicable			
VIII - REACTIVITY DATA			
STABILITY: Stable [x] Unstable []			
CONDITIONS TO AVOID: High storage temperatures.			
INCOMPATIBILITY (Material to Avoid) : Acids, reducing agents, amines and ammonia.			
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 aluminum or zinc may generate flammable hydrogen gas.			
REACTIVITY: not dangerously reactive			
IX - MSDS PREPARATION			
SOURCES USED: RTECS, Supplier MSDS		PREPARED BY: JohnsonDiversey Canada. Inc. Regulatory Department Food Division Phone (905) 829-1200	
PREPARATION DATE: April 15, 2003			
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