



I - PRODUCT IDENTIFICATION AND USE				MSDS ID: 0632	
PRODUCT NAME: OPTUM A					
USE: Circulation cleaner					
SUPPLIER: JohnsonDiversey Canada, Inc. 2401 Bristol Circle Oakville Ontario, L6H 6P1, Canada			EMERGENCY PHONE: 1-800-668-7171		
WHMIS CLASSIFICATION: D2B CHEMICAL FAMILY: Enzyme			TRADE NAME / SYNONYMS: not applicable CHEMICAL NAME: not applicable		
II - HAZARDOUS INGREDIENTS					
HAZARDOUS INGREDIENT	% w/w	CAS #	LD50 / LC50	Route / Species	
Protease	1-5	009073-77-2	not available		
III - HANDLING AND DISPOSAL PROCEDURES					
PERSONAL PROTECTIVE EQUIPMENT: Gloves: Natural Rubber, Neoprene or Nitrile Eye: safety glasses Footwear: not required Respiratory: If mists are generated, use NIOSH approved mask Other: not applicable					
SPECIAL HANDLING PROCEDURES AND EQUIPMENT: Do not breathe mist or spray.					
VENTILATION REQUIREMENTS: mechanical exhaust.					
INCOMPATIBILITY (Material to Avoid): Strong oxidizers.					
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: Opaque red/brown liquid - fermentation odour					
S.G. / BULK DENSITY(g/cc): 1.047			pH: 8.7		
VAPOUR PRESSURE (mmHg): not available			VAPOUR DENSITY (air=1): not applicable		
ODOUR THRESHOLD: not available			BOILING POINT: not applicable		
FREEZING POINT: not available			PERCENT VOLATILE: 50%		
SOLUBILITY IN WATER: soluble			EVAPORATION RATE (water=1): not available		
V - TOXICOLOGICAL PROPERTIES					
EFFECTS OF ACUTE EXPOSURE TO MATERIAL: EYES: May cause irritation. SKIN: Repeated or prolonged contact may result in irritation. INGESTION: May cause irritation. INHALATION: Breathing spray or mist may cause respiratory irritation.					
LD50 (calculated): Not applicable			LC50 (calculated): Not applicable		

OTHER TOXIC EFFECTS: None known.	
EFFECTS OF CHRONIC EXPOSURE TO MATERIAL: May cause development of allergic hypersensitivity in susceptible individuals.	
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.
INHALATION:	Remove patient to fresh air.
VII - FIRE AND EXPLOSION DATA	
FLAMMABLE: No	
FLASH POINT, °C: not applicable	AUTO IGNITION TEMPERATURE, °C: N/Av.
EXTINGUISHING MEDIA: Water [x] Dry Chemical [x] Carbon Dioxide [x] Foam [x] Other []	
SPECIAL FIRE FIGHTING PROCEDURES: not applicable.	
HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon, nitrogen, sulphur.	
EXPLOSIVE SENSITIVITY TO: not applicable	
VIII - REACTIVITY DATA	
STABILITY: Stable [x] Unstable []	
CONDITIONS TO AVOID: not applicable	
INCOMPATIBILITY (Material to Avoid) : Strong oxidizers.	
HAZARDOUS DECOMPOSITION PRODUCTS: not applicable	
REACTIVITY: not dangerously reactive	
IX - MSDS PREPARATION	
SOURCES USED: Supplier MSDS	PREPARED BY: JohnsonDiversey Canada. Inc. Regulatory Department Food Division Phone (905) 829-1200
PREPARATION DATE: April 15, 2003	
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