

MATERIAL SAFETY DATA SHEET

IDENTIFICATION & USE	TYPE OF PRODUCT Chloride Reagent		CHEMICAL FAMILY inorganic acid and oxidizing agent							
	PRODUCT NUMBER A1100178		FORMULA HNO₃, NaBrO₃							
	MANUFACTURER'S NAME AND ADDRESS IC CONTROLS™		PRODUCT USE Analyzer reagent							
	29 Centennial Rd.		EMERGENCY TELEPHONE NO. IC Controls:(519)941-8161							
	Orangeville, Ont. L9W 1R1		Poison Info Centre: 1 800 268-9017							
	CONTAINER SIZE AND TYPE 120 mL polyethylene bottle		USE AS RECEIVED	YES						
HAZARDOUS INGREDIENTS	SHIPPING NAME Nitric acid, not more than 70 per cent nitric acid		CLASS		8(9.2)					
	PIN 2031	WHMIS Classification Class E — corrosive		PACKING GROUP		II				
	CONCENTRATION*	HAZARDOUS	INGREDIENTS	CHEMICAL NAMES	LD ₅₀ mg/kg	LC ₅₀ **	CAS REGISTRY NO.			
	1 < 1		Sodium Bromate		N.A.	140 ppm	7789-38-0			
						(ipr-mus)				
	1 < 5		Nitric Acid		N.A.	3124 ppm	7697-37-2			
					1 hr					
					(inhalation, rat)					
* (1) % W/W (2) % V/V (3) % g/L				** SPECIES AND ROUTE						
PHYSICAL DATA	FREEZING POINT		-5 °C	MELTING POINT		°C	BOILING POINT	105 °C		
	VAPOUR PRESSURE		No Data	VAPOUR DENSITY (AIR = 1)		No Data	SPECIFIC GRAVITY (H ₂ O = 1)		1.1	
	COEFFICIENT OF WATER/OIL DISTRIBUTION		No Data	EVAPORATION RATE		No Data	pH AT 25 °C		< 1	
	ODOUR THRESHOLD		No Data	PHYSICAL STATE		GAS	LIQUID	PASTE	SOLID	POWDER
	ODOUR AND APPEARANCE		Colourless, odourless liquid.							
FIRE & EXPLOSION DATA	FLASH POINT AND METHOD OF DETERMINATION		Not applicable		FLAMMABLE LIMITS		L.E.L.	U.E.L.		
	CONDITIONS OF FLAMMABILITY		Noncombustible.				N. A.	N. A.		
	MEANS OF EXTINCTION		Water							
	HAZARDOUS COMBUSTION PRODUCTS		Oxides of nitrogen, Na ₂ O, Br ₂							
					AUTO IGNITION TEMP.		°C			
	EXPLOSION DATA		SENSITIVITY TO MECHANICAL IMPACT		none					
		SENSITIVITY TO STATIC DISCHARGE		none						
SPECIAL FIRE FIGHTING PROCEDURES		Self-contained breathing apparatus should be worn.								

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REACTIVITY	STABLE	YES	CONDITIONS TO AVOID		PRODUCT NUMBER	
	UNSTABLE				A1100178	
	INCOMPATIBILITY—MATERIALS TO AVOID					
	Caustics HAZARDOUS DECOMPOSITION PRODUCTS Oxides of nitrogen, bromine, bromide. CONDITIONS OF REACTIVITY					
HEALTH HAZARD DATA	HAZARDOUS ROUTES OF ENTRY	INHALATION	INGESTION	EYE CONTACT	SKIN CONTACT	SKIN ABSORPTION
			YES	YES	irritant	
	EFFECTS OF EXPOSURE (ACUTE)					
	Ingestion: may cause pain, vomiting, burning of the mouth and throat.					
	EFFECTS OF EXPOSURE (CHRONIC)					
	Skin Contact: skin burns, blisters. Prolonged or repeated contact to dilute solutions may cause irritation and dermatitis. Eye Contact: burns, watering, possible permanent damage.					
	EXPOSURE LIMITS					
	SENSITIZATION TO PRODUCT					
	CARCINOGENICITY					
	No information available.					
OTHER TOXICOLOGICAL EFFECTS						
No information available.						
EMERGENCY AND FIRST AID PROCEDURES						
Eyes: irrigate with water immediately, frequently lifting eyelids. Flush for at least 15 minutes.						
Skin: wash with plenty of water.						
Ingestion: Never give anything if victim is rapidly losing consciousness, is unconscious, or is convulsing. Rinse mouth thoroughly with water. If victim is conscious, induce vomiting. Have victim drink 200-400 mL of water or milk to dilute. Give artificial respiration if necessary.						
Consult physician for all forms of serious exposure.						
PREVENTIVE MEASURES	RESPIRATORY PROTECTION					
	VENTILATION	LOCAL EXHAUST		SPECIAL		
		MECHANICAL (GENERAL)		Not Applicable		
			No		OTHER	
					No	
	HAND PROTECTION			EYE PROTECTION		
	impervious gloves			splash-proof safety goggles		
	PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL					
	Wash site of spillage with water					
	WASTE DISPOSAL METHOD					
Follow all federal, provincial, and local regulations where applicable.						
Dilute and flush to sewer with plenty of water.						
HANDLING PROCEDURES AND EQUIPMENT						
Follow standard safety procedures.						
STORAGE REQUIREMENTS						
Keep container sealed. Store in cool area away from direct sunlight and incompatible materials.						
SPECIAL SHIPPING INFORMATION						
PREPARATION	PREPARED BY		APPROVED BY			
	Peter Bakker		Peter Bakker			
	TITLE		TITLE		TELEPHONE	
			Chemistry Manager		(519) 941-8161	
		DATE		DATE		
		November 5, 2009				
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