

MATERIAL SAFETY DATA SHEET

IDENTIFICATION & USE	TYPE OF PRODUCT Chlorine sensor renew solution		CHEMICAL FAMILY inorganic acid							
	PRODUCT NUMBER A1100227		FORMULA HNO ₃							
	MANUFACTURER'S NAME AND ADDRESS IC CONTROLS™		PRODUCT USE							
	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 30 mL polyethylene bottle		USE AS RECEIVED	YES						
HAZARDOUS INGREDIENTS	SHIPPING NAME not regulated		CLASS							
	PIN	WHMIS Classification E: Corrosive	PACKING GROUP II							
	CONCENTRATION*	HAZARDOUS INGREDIENTS	CHEMICAL NAMES	LD ₅₀ mg/kg	LC ₅₀ **	CAS REGISTRY NO.				
	1 < 10	Nitric acid				7697-37-2				
PHYSICAL DATA	FREEZING POINT		-3 °C	MELTING POINT		N. appl. °C	BOILING POINT		100 °C	
	VAPOUR PRESSURE		Not Avail.	VAPOUR DENSITY (AIR = 1)		N. Avail.	SPECIFIC GRAVITY (H ₂ O = 1)		1.02	
	COEFFICIENT OF WATER/OIL DISTRIBUTION		Not Appl.	EVAPORATION RATE		Not Avail.	pH AT 25 °C		0.5	
	ODOUR THRESHOLD		Not Avail.	PHYSICAL STATE		GAS	LIQUID	PASTE	SOLID	POWDER
	ODOUR AND APPEARANCE		clear, odourless liquid							
	FLASH POINT AND METHOD OF DETERMINATION		Not applicable		FLAMMABLE LIMITS		L.E.L.	U.E.L.		N. A. N. A.
FIRE & EXPLOSION DATA	CONDITIONS OF FLAMMABILITY		not flammable							
	MEANS OF EXTINCTION		any							
	HAZARDOUS COMBUSTION PRODUCTS		May react explosively with combustible organic and readily oxidizable materials such as wood							
	EXPLOSION DATA		SENSITIVITY TO MECHANICAL IMPACT		none		AUTO IGNITION TEMP.		°C	
			SENSITIVITY TO STATIC DISCHARGE		none					
	SPECIAL FIRE FIGHTING PROCEDURES		Self-contained breathing apparatus should be worn.							

MATERIAL SAFETY DATA SHEET

REACTIVITY	STABLE	YES	CONDITIONS TO AVOID heating to decomposition			PRODUCT NUMBER A1100227
	UNSTABLE					
	INCOMPATIBILITY—MATERIALS TO AVOID acetic acid, organics, H ₂ S, sodium hydroxide					
	HAZARDOUS DECOMPOSITION PRODUCTS					
CONDITIONS OF REACTIVITY						
HEALTH HAZARD DATA	HAZARDOUS ROUTES OF ENTRY	INHALATION	INGESTION YES	EYE CONTACT YES	SKIN CONTACT YES	SKIN ABSORPTION
	EFFECTS OF EXPOSURE (ACUTE) can irritate eyes, nose, skin and throat.					
	EFFECTS OF EXPOSURE (CHRONIC) May cause burns, skin irritation, and permanent damage to the eyes.					
	EXPOSURE LIMITS					
	SENSITIZATION TO PRODUCT					
	CARCINOGENICITY					
	OTHER TOXICOLOGICAL EFFECTS Medical conditions aggravated by exposure: respiratory and skin disease.					
	EMERGENCY AND FIRST AID PROCEDURES					
	Eyes: irrigate with water immediately, frequently lifting eyelids.					
	Skin: wash with plenty of water.					
Ingestion: drink large quantities of water. do not induce vomiting.						
Consult physician for all forms of serious exposure.						
PREVENTIVE MEASURES	RESPIRATORY PROTECTION ESCAPE: GMS, SCBA. Note: do not use oxidizable sorbents.					
	VENTILATION	LOCAL EXHAUST fume hood			SPECIAL Not Applicable	
		MECHANICAL (GENERAL) No			OTHER No	
	HAND PROTECTION poly gloves			EYE PROTECTION splash-proof safety goggles		
	PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL dilute with water, neutralize					
	WASTE DISPOSAL METHOD Dilute with water and neutralize with alkaline materials. Flush to sewer.					
	HANDLING PROCEDURES AND EQUIPMENT Emergency eye wash station should be available. Wear lab coat.					
	STORAGE REQUIREMENTS Keep container sealed. Store away from heat and reactive materials.					
	SPECIAL SHIPPING INFORMATION					
	PREPARATION	PREPARED BY Peter Bakker		APPROVED BY Peter Bakker		
TITLE Chemistry Manager		TITLE <i>Peter Bakker</i>		TELEPHONE (519) 941-8161		
		DATE November 5, 2009				
<p><i>The information provided in this Material Safety Data Sheet is compiled from data currently available to us. Safe use of the materials and adoption of safety precautions are the responsibility of the user. IC CONTROLS makes no representation or warranties, either express or implied, of merchantability, fitness for a particular purpose with respect to the information set forth herein or to the product to which the information refers. Accordingly, IC CONTROLS will not be responsible for damages, including consequential damages, resulting from the use of or reliance upon this information.</i></p>						