

## MATERIAL SAFETY DATA SHEET

IDENTIFICATION & USE	TYPE OF PRODUCT <b>1.00 pH buffer</b>		CHEMICAL FAMILY <b>inorganic acid</b>							
	PRODUCT NUMBER <b>A1100070</b>		FORMULA <b>HCl</b>							
	MANUFACTURER'S NAME AND ADDRESS <b>IC CONTROLS™</b>		PRODUCT USE <b>Analyzer standard</b>							
	29 Centennial Rd.		EMERGENCY TELEPHONE NO. <b>IC Controls: (519)941-8161</b>							
	Orangeville, Ont. L9W 1R1		<b>Poison Info Centre: 1 800 268-9017</b>							
	CONTAINER SIZE AND TYPE <b>1L polyethylene bottle</b>		USE AS RECEIVED	<b>YES</b>						
HAZARDOUS INGREDIENTS	SHIPPING NAME <b>Hydrochloric Acid Solution</b>		CLASS		<b>8(9.2)</b>					
	PIN <b>1789</b>	WHMIS Classification <b>Class E — Corrosive</b>			PACKING GROUP <b>II</b>					
	CONCENTRATION*	HAZARDOUS	INGREDIENTS	CHEMICAL NAMES	LD <sub>50</sub> mg/kg	LC <sub>50</sub> **	CAS REGISTRY NO.			
	1	0.2-0.5	Hydrochloric Acid					7647-01-0		
PHYSICAL DATA	FREEZING POINT		<b>-5 °C</b>	MELTING POINT		<b>N. Appl. °C</b>	BOILING POINT	<b>100 °C</b>		
	VAPOUR PRESSURE		<b>Not Avail.</b>	VAPOUR DENSITY (AIR = 1)		<b>1</b>	SPECIFIC GRAVITY (H <sub>2</sub> O = 1)		<b>1</b>	
	COEFFICIENT OF WATER/OIL DISTRIBUTION		<b>Not Appl.</b>	EVAPORATION RATE		<b>Not Avail.</b>	pH AT 25 °C		<b>1</b>	
	ODOUR THRESHOLD		<b>Not Avail.</b>	PHYSICAL STATE		GAS	LIQUID	PASTE	SOLID	POWDER
	ODOUR AND APPEARANCE		<b>clear, odourless liquid</b>							
	FLASH POINT AND METHOD OF DETERMINATION		<b>Not applicable</b>			FLAMMABLE LIMITS		L.E.L.	U.E.L.	
FIRE & EXPLOSION DATA	CONDITIONS OF FLAMMABILITY							<b>N. A.</b>	<b>N. A.</b>	
	MEANS OF EXTINCTION		<b>CO<sub>2</sub>, water, Dry chemical</b>							
	HAZARDOUS COMBUSTION PRODUCTS									
	HCl gas, chlorine gas if in contact with oxidizers		AUTO IGNITION TEMP.							
	EXPLOSION DATA		SENSITIVITY TO MECHANICAL IMPACT							
			<b>none</b>			SENSITIVITY TO STATIC DISCHARGE				
		<b>none</b>								
SPECIAL FIRE FIGHTING PROCEDURES		<b>Protective clothing should be worn. Wear self-contained breathing apparatus.</b>								

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<b>REACTIVITY</b>	STABLE	YES	CONDITIONS TO AVOID none		PRODUCT NUMBER A1100070	
	UNSTABLE					
	INCOMPATIBILITY—MATERIALS TO AVOID Oleum, F <sub>2</sub> , KNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , NH <sub>4</sub> OH, Na, RBC <sub>2</sub> H, HClO <sub>4</sub> , NaOH, CaC <sub>2</sub>					
	HAZARDOUS DECOMPOSITION PRODUCTS HCl gas, chlorine gas if in contact with oxidizers					
CONDITIONS OF REACTIVITY						
<b>HEALTH HAZARD DATA</b>	HAZARDOUS ROUTES OF ENTRY	INHALATION	INGESTION YES	EYE CONTACT YES	SKIN CONTACT YES	SKIN ABSORPTION
	EFFECTS OF EXPOSURE (ACUTE) Irritation in respiratory tract, burns on skin					
	EFFECTS OF EXPOSURE (CHRONIC) pains in chest, heart and respiratory problems					
	EXPOSURE LIMITS					
	SENSITIZATION TO PRODUCT					
	CARCINOGENICITY					
	OTHER TOXICOLOGICAL EFFECTS					
	EMERGENCY AND FIRST AID PROCEDURES Eyes: flush with large amounts of water for 15 minutes while lifting eyelids. Call physician. Skin: flush with plenty of water. Ingestion: If patient is conscious give large amounts of water. Do not induce vomiting. Call physician.					
	RESPIRATORY PROTECTION					
	<b>PREVENTIVE MEASURES</b>	VENTILATION		LOCAL EXHAUST	SPECIAL	
		MECHANICAL (GENERAL)	OTHER			
HAND PROTECTION protective gloves			EYE PROTECTION protective goggles			
PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL Cover spill with soda ash, add water, mix and scoop up slurry.						
WASTE DISPOSAL METHOD May be flushed to sewer with large amounts of water after neutralizing with soda ash and slaked lime.						
HANDLING PROCEDURES AND EQUIPMENT Emergency eyewash should be available. Wash hands after use.						
STORAGE REQUIREMENTS Store away from heat and combustible materials.						
SPECIAL SHIPPING INFORMATION						
<b>PREPARATION</b>	PREPARED BY Peter Bakker		APPROVED BY Peter Bakker			
	TITLE		TITLE		TELEPHONE	
			Chemistry Manager		(519) 941-8161	
		<i>Peter Bakker</i>		DATE November 5, 2009		
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