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MATERIAL SAFETY DATA SHEET

IDENTIFICATION & USE	TYPE OF PRODUCT potassium nitrate crystals		CHEMICAL FAMILY inorganic Salt , oxidizing agent						
	PRODUCT NUMBER A9210079		FORMULA KNO 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						
HAZARDOUS INGREDIENTS	CONTAINER SIZE AND TYPE		USE AS RECEIVED						
	SHIPPING NAME Sodium Nitrate and Potassium Nitrate Mixtures		CLASS	5.1					
	PIN 1486	WHMIS Classification Class C — Oxidizing material		PACKING GROUP III					
	CONCENTRATION [*]	HAZARDOUS INGREDIENTS	CHEMICAL NAMES	LD ₅₀ mg/kg	LC ₅₀ **	CAS REGISTRY NO.			
	1 >95	Potassium Nitrate		TLV Units	2ppm	7757-59-7			
PHYSICAL DATA	FREEZING POINT		Not Appl.	MELTING POINT		334 °C	BOILING POINT		400 °C
	VAPOUR PRESSURE		Not Avail.	VAPOUR DENSITY (AIR = 1)		N. Avail.	SPECIFIC GRAVITY (H ₂ O = 1)		2.109
	COEFFICIENT OF WATER/OIL DISTRIBUTION		Not Avail.	EVAPORATION RATE		N. Avail.	pH AT 25 °C		4-9(5% sol'n)
	ODOUR THRESHOLD		Not Avail.	PHYSICAL STATE		GAS LIQUID PASTE SOLID POWDER X			
	ODOUR AND APPEARANCE colourless, transparent crystals or white power with a saline taste.								
FIRE & EXPLOSION DATA	FLASH POINT AND METHOD OF DETERMINATION		not flammable		FLAMMABLE LIMITS		L.E.L.	U.E.L.	N. A. N. A.
	CONDITIONS OF FLAMMABILITY Negligible fire hazard when exposed to heat or flame.								
	MEANS OF EXTINCTION water spray.								
	HAZARDOUS COMBUSTION PRODUCTS Oxides of nitrogen and potassium.								
	EXPLOSION DATA		SENSITIVITY TO MECHANICAL IMPACT none		SENSITIVITY TO STATIC DISCHARGE none		AUTO IGNITION TEMP.		N.A. °C
SPECIAL FIRE FIGHTING PROCEDURES Oxidizers decompose, specially when heated, to yield oxygen which will increase the burning rate of combustible matter. Contact with easily oxidizable, organic, or other combustible materials may result in ignition, or violent combustion.									

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REACTIVITY	STABLE	YES	CONDITIONS TO AVOID			PRODUCT NUMBER A9210079
	UNSTABLE					
	INCOMPATIBILITY—MATERIALS TO AVOID Strong reducing agents, finely powdered metals, strong acids, organic materials.					
	HAZARDOUS DECOMPOSITION PRODUCTS Thermal decomposition may emit toxic oxides of nitrogen and potassium.					
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) Inhalation: irritation of upper respiratory tract. Ingestion: toxic to digestive tract and central nervous system. Skin: may cause redness. Eyes: direct contact may cause redness.					
	EFFECTS OF EXPOSURE (CHRONIC) Teratogenicity: Repeated or prolonged exposure to nitrates may cause fetus anemia, nephritis, and possibly methemoglobinemia.					
	EXPOSURE LIMITS					
	SENSITIZATION TO PRODUCT					
	CARCINOGENICITY Not considered carcinogenic					
	OTHER TOXICOLOGICAL EFFECTS					
	EMERGENCY AND FIRST AID PROCEDURES Skin: wash with plenty of water.					
	Eyes: irrigate with water for at least 15 minutes, frequently lifting eyelids, until no trace of chemical remains. Ingestion: remove by gastric lavage or emesis. Maintain blood pressure and airway. Give oxygen if respiration is depressed. Inhalation: if breathing has stopped, perform artificial respiration. Keep person warm and at rest. Skin: Remove contaminated clothing and shoes. Wash affected area with soap or mild detergent and large amounts of water.					
	RESPIRATORY PROTECTION					
PREVENTIVE MEASURES	VENTILATION	LOCAL EXHAUST			SPECIAL Not Applicable	
		MECHANICAL (GENERAL) Not Applicable			OTHER Not Applicable	
	HAND PROTECTION protective gloves			EYE PROTECTION splash-proof goggles		
	PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL Keep combustibles away from spilled material. Do not touch spilled material. Cover with dry lime or soda ash and with clean shovel place material into container.					
	WASTE DISPOSAL METHOD Observe all federal, provincial and local regulations when storing or disposing of this substance.					
	HANDLING PROCEDURES AND EQUIPMENT Follow routine safe handling procedures. Do not get in eyes, on skin or clothing.					
	STORAGE REQUIREMENTS Store away from heat and combustible materials.					
	SPECIAL SHIPPING INFORMATION					
PREPARATION	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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