



KENCRO

CHEMICALS

PRODUCT : PHOSPHORIC ACID

SECTION 1 : PRODUCT INFORMATION

T.D.G. CLASSIFICATION	8
UN NUMBER	1805
PACKING GROUP	III
PRODUCT NAME	PHOSPHORIC ACID
WHMIS CLASSIFICATION	E (85%) D2B, E (75%)
CHEMICAL FORMULA	H ₃ PO ₄
MOLECULAR WEIGHT	98
CHEMICAL FAMILY	INORGANIC
MATERIAL USE	REFER TO TECHNICAL LITERATURE

SECTION 2: HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	%	T.L.V.	C.A.S. #	LD/50,ROUTE,SPECIE	LC/50,ROUTE,SPECIE
PHOSPHORIC ACID	75-85	1 MG/M3	007664-38-2	1530 MG/KG (ORAL, RAT)	(75%) 4701 ppm/30M
WATER	BALANCE	N.AV.	007732-18-5	N.AV.	N.AV.

SECTION 3: PHYSICAL DATA

APPEARANCE	VISCIOUS COLOURLESS CLEAR LIQUID		
PHYSICAL STATE	LIQUID		
ODOUR	NONE		
ODOUR THRESHOLD	N.AP.		
VAPOUR PRESSURE (mmHg)	@ 25°C 8.2 (75%)	5 (85%)	
VAPOUR DENSITY (AIR=1)	N.AV.		
EVAPORATION RATE	N.AV.		
BOILING POINT	135°C		
FREEZING POINT	-17.5°C (75%)	4.6°C (80%)	21.2°C (85%)
pH	<1.0		
SPECIFIC GRAVITY (WATER=1)	1.57 (75%)	1.64 (80%)	1.70 (85%)
SOLUBILITY IN WATER (% W/W)	COMPLETELY MISCIBLE		
COEFFICIENT OF WATER/OIL DIST.	N.AV.		

SECTION 4 : FIRE AND EXPLOSION DATA

FLAMMABILITY	NOT FLAMMABLE
IF YES, UNDER WHICH CONDITIONS?	
EXTINGUISHING MEDIA	AS FOR SURROUNDING FIRES.
SPECIAL PROCEDURES	FIREFIGHTERS SHOULD WEAR USUAL PROTECTIVE GEAR; SELF-CONTAINED BREATHING APPARATUS.
FLASH POINT(C), METHOD	N.AP.
AUTO IGNITION TEMPERATURE	N.AP.
T.D.G. FLAM. CLASS	NOT REGULATED
UPPER FLAMMABLE LIMIT (UFL) (% BY VOL)	N.AP.
LOWER FLAMMABLE LIMIT (LFL) (% BY VOL)	N.AP.

PRODUCT : PHOSPHORIC ACID

HAZARDOUS COMBUSTION PRODUCTS	FUMES PRODUCED WHEN HEATED TO DECOMPOSITION MAY INCLUDE PHOSPHOROUS OXIDES
EXPLOSION DATA	
SENSITIVITY TO STATIC DISCHARGE	N.AV.
SENSITIVITY TO IMPACT	N.AV.
RATE OF BURNING	N.AV.
EXPLOSIVE POWER	N.AV.

SECTION 5 : REACTIVITY DATA

CHEMICAL STABILITY	
YES	STABLE
NO, WHICH CONDITIONS?	
COMPATIBILITY WITH OTHER SUBSTANCES:	
YES	
NO, WHICH ONES?	ALKALIS, ACTIVE METALS (EG. Fe, Zn, Al)
REACTIVITY CONDITIONS	REACTION WITH ALKALIS MAY PRODUCE CONSIDERABLE HEAT. REACTION WITH ACTIVE METALS LIBERATES HYDROGEN WHICH COULD CREATE AN EXPLOSIVE ATMOSPHERE IN A CONFINED SPACE
CONDITIONS TO AVOID	AVOID CONTAMINATION WITH REACTIVE SUBSTANCES LISTED ABOVE
HAZARDOUS POLYMERIZATION	WILL NOT OCCUR
HAZARDOUS PRODUCTS OF DECOMPOSITION	EXPOSURE TO FIRE MAY LIBERATE PHOSPHORUS OXIDES.

SECTION 6: TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY	
SKIN CONTACT	CONCENTRATED SOLUTIONS MAY CAUSE SEVERE BURNS IF NOT WASHED OFF IMMEDIATELY. DERMATITIS MAY OCCUR FROM PROLONGED OR REPEATED SKIN CONTACT.
SKIN ABSORPTION	NOT ABSORBED.
EYE CONTACT	MISTS MAY CAUSE EYE IRRITATION. EYE SPLASHES WITH CONCENTRATED SOLUTIONS MAY CAUSE SEVERE BURNS AND PERMANENT EYE DAMAGE.
INHALATION	VAPOUR OR MIST MAY CAUSE IRRITATION OF THE NOSE AND THROAT.
INHALATION, CHRONIC	N.AV.
INGESTION	CORROSIVE TO DIGESTIVE TRACT. CAUSES STOMACH PAIN, DIARRHEA AND CONVULSIONS. IN VERY SEVERE CASES, COLLAPSE AND DEATH.
EFFECTS OF ACUTE EXPOSURE.	SEE ABOVE
EFFECTS OF CHRONIC EXPOSURE	SEE ABOVE
LD 50 MATERIAL, SPECIES & ROUTE	SEE SECTION II
LC 50 MATERIAL, SPECIES & ROUTE	SEE SECTION II
EXPOSURE LIMIT OF MATERIAL	SEE SECTION II
IRRITANCY OF MATERIAL	SEVERE. SEE ABOVE.
SENSITIZING CAPABILITY OF MATERIAL	N.AV.
CARCINOGENICITY OF MATERIAL	NOT LISTED BY ACGIH OR IARC
REPRODUCTIVE EFFECTS	N.AV.
MUTAGENICITY	N.AV.
TERATOGENICITY	N.AV.
TOXICOLOGICAL SYNERGISM	N.AV.

SECTION 7 : PREVENTATIVE MEASURES

GLOVES/TYPE	RUBBER OR PLASTIC GLOVES
RESPIRATORY/TYPE	IN MISTY ATMOSPHERES USE AN APPROVED MIST RESPIRATOR. IF RESPIRATORY IRRITATION IS EXPERIENCED, USE AN APPROVED AIR-PURIFYING RESPIRATOR.
EYE/TYPE	CHEMICAL SAFETY GOGGLES
FOOTWEAR/TYPE	RUBBER SAFETY BOOTS
CLOTHING /TYPE	USE PROTECTIVE CLOTHING IMPERVIOUS TO THIS MATERIAL. SELECTION OF SPECIFIC ITEMS SUCH AS GLOVES, BOOTS, APRON, HARD HAT WITH FACE SHIELD OR FULL BODY SUIT WILL DEPEND ON OPERATIONS
OTHER/TYPE	EYE BATH AND SAFETY SHOWER

PRODUCT : PHOSPHORIC ACID

ENGINEERING CONTROLS	AVOID BREATHING IN MISTS; GOOD VENTILATION SHOULD BE SUFFICIENT FOR CONDITIONS. PROVIDE LOCAL EXHAUST VENTILATION IF MIST OR VAPOUR IS GENERATED.
LEAK/SPILL	ONLY TRAINED AND PROPERLY PROTECTED PERSONNEL SHOULD BE INVOLVED IN SPILL CLEAN-UP OPERATIONS. FOR SMALL SPILLS CAREFULLY FLUSH WITH WATER.
WATER.	LARGER SPILLS CONTAIN WITH DYKE AND NEUTRALIZE WITH LIMESTONE OR SODA ASH.
WASTE DISPOSAL	DISPOSAL OF PHOSPHORIC ACID MUST MEET ALL FEDERAL, PROVINCIAL AND LOCAL REGULATIONS.
HANDLING PROCEDURES AND EQUIPMENT	USE STAINLESS STEEL OR ACID RESISTANT PLASTIC EQUIPMENT. HAVE LIMESTONE OR LIME AVAILABLE FOR NEUTRALIZATION. WHEN DILUTING, <u>ALWAYS ADD THE ACID SLOWLY TO WATER</u> TO AVOID OVERHEATING AND POSSIBLE SPLATTERING
STORAGE NEEDS	MAY FREEZE AT LOW TEMPERATURES, ESPECIALLY AT HIGH CONCENTRATION. KEEP AWAY FROM ALKALIS AND ACTIVE METALS.
SPECIAL SHIPPING INSTRUCTIONS	STORE IN DRY, COOL PLACE SEE SECTION 1 T.D.G CLASSIFICATION

SECTION 8 : FIRST AID MEASURES

INSTRUCTIONS:

EYES: IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR A MINIMUM OF 30 MINUTES. HOLD EYELIDS OPEN DURING FLUSHING. DO NOT TRANSPORT VICTIM UNTIL THE RECOMMENDED FLUSHING PERIOD IS COMPLETED UNLESS FLUSHING CAN BE CONTINUED DURING TRANSPORT.

SKIN: FLUSH SKIN WITH RUNNING WATER FOR A MINIMUM OF 30 MINUTES. START FLUSHING WHILE REMOVING CONTAMINATED CLOTHING. IF IRRITATION PERSISTS, REPEAT FLUSHING. OBTAIN MEDICAL ATTENTION IMMEDIATELY. DO NOT TRANSPORT VICTIM UNLESS THE RECOMMENDED FLUSHING PERIOD IS COMPLETED OR FLUSHING CAN BE CONTINUED DURING TRANSPORT.

INGESTION: GIVE WATER OR MILK TO DILUTE. DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.

INHALATION: N.AV.

NOTES TO PHYSICIAN: (75%) MODERATELY CORROSIVE AGENT WHICH MAY BURN ANY EXPOSED TISSUES UPON OTHER THAN VERY BRIEF CONTACT. EYES, SKIN AND MUCOUS MEMBRANES SHOULD BE FLUSHED THOROUGHLY WITH WATER AND OPHTHALMOLOGIC CONSULTATION SHOULD BE OBTAINED FOR ANY CORNEAL BURNS. IN CASES OF INGESTION, IMMEDIATE DILUTION WITH WATER, MILK OR DEMULCENTS IS WORTHWHILE, BUT ATTEMPTS TO NEUTRALIZE WITH A BASE SHOULD BE AVOIDED BECAUSE OF EXCESSIVE GAS AND HEAT FORMATION, WHICH MAY INCREASE THE THREAT OF ESOPHAGOGASTRIC PERFORATION. VOMITING AND DIARRHEA (LAXATIVE EFFECT OF PHOSPHATES) ARE EXPECTED WITH LARGE DOSES. PARENTERAL FLUID ADMINISTRATION MAY BE NEEDED IF LOSSES THEREFROM ARE SEVERE, OR IF SHOCK ENSUES. SUPPORTIVE CARE MAY BE NEEDED FOR SUCH OTHER COMPLICATIONS AS GLOTTAL EDEMA, HEMATEMESIS AND PERFORATION (UNLIKELY). INDUCED VOMITING SHOULD BE AVOIDED BECAUSE LOCAL TISSUE INJURY MAY BE AGGRAVATED, BUT THE PATIENT SHOULD BE WATCHED FOR HYPERPHOSPHATEMIA AND HYPOCALCEMIA. MILK OR OTHER DEMULCENTS MAY BE WORTHWHILE FOR GASTRIC IRRITATION.

SECTION 9 : PREPARATION INFORMATION

EMERGENCY PHONE NO	(613) 996 6666 (CANUTEC)
PREPARED BY	KENCRO CHEMICALS LIMITED
	(905) 827 4133
DATE	JUNE 2008

LEGEND:

ACGIH	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
Al	ALUMINUM
CAS #	CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER
Fe	IRON
IARC	INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
LFL	LOWER FLAMMABLE LIMIT
N.AP	NOT APPLICABLE
N. AV	NOT AVAILABLE
T.D.G.	TRANSPORTATION OF DANGEROUS GOODS ACT/REGULATIONS
TLV	THRESHOLD LIMIT VALUE
UFL	UPPER FLAMMABLE LIMIT

PRODUCT : PHOSPHORIC ACID

WHMIS
Zn

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM
ZINC

THE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS OF THE DATE COMPILED. HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO REVIEW THIS INFORMATION, SATISFY THEMSELVES AS TO ITS SUITABILITY AND COMPLETENESS AND PASS ON THE INFORMATION TO ITS EMPLOYEES OR CUSTOMERS. KENCRO CHEMICALS LIMITED DOES NOT ACCEPT RESPONSIBILITY FOR ANY LOSS OR DAMAGE WHICH MAY OCCUR FROM THE USE OF THIS INFORMATION.