

MSDS# A027

***** SECTION 1 - IDENTIFICATION *****

IDENTITY: PIERCE MOLECULAR DEEP PENETRANT - AEROSOL
 MANUFACTURER: LA-CO INDUSTRIES, INC/MARKAL COMPANY
 1201 PRATT BOULEVARD
 ELK GROVE VILLAGE IL 60007

EMERGENCY TELEPHONE NO. ch Chemtrec 1-800-424-9300
 INFORMATION TELEPHONE NO. 847-956-7600
 DATE PREPARED: 09 June 15, 2001
 SUPERSEDES ISSUE DATE 06 September 25, 1998

LABELING

HMS: 331 NFPA: 331 WHMIS(CANADA): D-1B, B-5, A
 EPA HAZARDS: ACUTE, FLAMMABLE D.O.T. & U.P.S.: CONSUMER COMMODITY ORM-D
 BILL OF LADING: CEMENT OR COMPOUND, PIPE FITTING

***** SECTION 2 - HAZARDOUS INGREDIENTS *****

INGREDIENT	C.A.S.#	OSHA PEL	ACGIH TLV	SUPERFUND	
				RQ	§
PETROLEUM NAPHTHA 2,3,4	8052-41-3	2900mg/m ³	525mgm/m ³	N.A.	N.A.
SOLVENT REFINED PARAFFINIC PETROLEUM OIL MIST	64741-88-4	5mg/m ³	5mgm/m ³	N.A.	N.A.
BUTANE 2,3,4	106-97-8	N.A.	800ppm	N.A.	N.A.
PROPANE 2,3,4	74-98-6	1000ppm	N.A.	N.A.	N.A.
ISOBUTANE 2,3,4	75-28-5	N.A.	N.A.	N.A.	N.A.

- 2 THE INDICATED CHEMICAL(S) APPEAR ON THE MASSACHUSETTS SUBSTANCES LIST.
- 3 THE INDICATED CHEMICAL(S) APPEAR ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST.
- 4 THE INDICATED CHEMICAL(S) APPEAR ON THE NEW JERSEY RIGHT TO KNOW HAZARDOUS SUBSTANCE LIST.

***** SECTION 3 - PHYSICAL / CHEMICAL CHARACTERISTICS *****

BOILING POINT: NOT APPLICABLE SPECIFIC GRAVITY(H₂O=1): <1
 VAPOR PRESSURE(mmHg):CONTAINER PRESSURE psig 45-55 MELTING POINT: N.A.
 VAPOR DENSITY(AIR=1): >1 EVAP. RATE(butyl acetate=1): <1
 SOLUBILITY IN WATER: INSOLUBLE
 APPEARANCE: AMBER LIQUID ODOR: PETROLEUM

***** SECTION 4 - FIRE AND EXPLOSION HAZARD DATA *****

FLASH POINT (method used): 100° F. MINIMUM (coc) FLAMMABLE AEROSOL 16 CFR 1500.4
 FLAMMABLE LIMITS - LEL: N.A. UEL:N.A.
 EXTINGUISHING MEDIA: USE NATIONAL FIRE PROTECTION ASS'N (NFPA) CLASS B EXTINGUISHER (CO₂, DRY CHEM OR FOAM) DESIGNED TO EXTINGUISH NFPA CLASS 1A FLAMMABLE LIQUID FIRES.
 SPECIAL FIRE FIGHTING PROCEDURES: WATER SPRAY MAY BE INEFFECTIVE. WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT BUILD-UP AND EXPLOSION WHEN EXPOSED TO EXTREME HEAT. IF WATER IS USED, FOG NOZZLES ARE PREFERABLE. WEAR GOGGLES AND SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING.
 UNUSUAL FIRE AND EXPLOSION HAZARDS: CANS WILL RUPTURE FROM INTERNAL PRESSURE AT ELEVATED TEMPERATURES AND DISCHARGE CONTENTS. WHEN HEATED TO DECOMPOSITION TOXIC FUMES ARE FORMED.

***** SECTION 5 - REACTIVITY DATA *****

STABILITY: STABLE
 CONDITIONS TO AVOID: STORAGE ABOVE 120 deg.F, AS CANS MAY BURST. DROPPING, AS CANS MAY BURST. OPEN FLAME AND HOT SURFACES.
 INCOMPATIBILITY (MATERIALS TO AVOID): OXIDIZING AGENTS.
 HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE AND OTHER TOXIC FUMES.
 HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
 CONDITIONS TO AVOID: NOT KNOWN.

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***** SECTION 6 - HEALTH HAZARD DATA *****

ROUTES OF ENTRY: INHALATION? YES SKIN? YES INGESTION? YES

HEALTH HAZARDS:

DANGER: HARMFUL OR FATAL IF SWALLOWED.

EYES: MINOR IRRITATION.

SKIN: CAN CAUSE IRRITATION FROM PROLONGED OR REPEATED CONTACT.

INGESTION: HARMFUL OR FATAL IF SWALLOWED AND/OR ASPIRATED INTO LUNGS.

INHALATION: CAN BE HARMFUL IF HIGH CONCENTRATIONS INHALED.

CARCINOGENICITY: NTP? NO IARC? NO OSHA? NO

SIGNS AND SYMPTOMS OF EXPOSURE: RESPIRATORY IRRITATION, MUSCULAR WEAKNESS, CONFUSION, IMPAIRED COORDINATION, HEADACHE, NAUSEA, DRYING OF SKIN, EYE IRRITATION.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NOT KNOWN.

EMERGENCY AND FIRST AID PROCEDURES:

QUICKLY FOLLOW DIRECTIONS BELOW AND CALL A POISON CONTROL CENTER (OR EMERGENCY DEPARTMENT OR PHYSICIAN). ALWAYS GET PROMPT MEDICAL ATTENTION FOR ANY ILL EFFECT WHICH CONTINUES (OR DEVELOPS LATER).

EYES: FLUSH THEM WITH PLENTY OF WATER WHILE REMOVING ANY CONTACT LENSES, THEN HOLD EYELIDS OPEN AND CONTINUE FLUSHING FOR 15 MINUTES.

SKIN: REMOVE ANY CONTAMINATED CLOTHING, SHOES OR JEWELRY, ETC. AND WASH THOROUGHLY BEFORE WEARING. WASH AFFECTED SKIN WITH SOAP AND WATER.

INGESTION: GET IMMEDIATE MEDICAL ATTENTION. LUNG ASPIRATION HAZARD; DO NOT INDUCE VOMITING. IMMEDIATELY (FOR CONSCIOUS VICTIM) RINSE MOUTH WITH WATER, SPIT OUT RINSE AND DRINK A GLASSFUL OF WATER.

INHALATION: IF ADVERSE EFFECTS OCCUR, REMOVE TO UNCONTAMINATED AREA. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION.

***** SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE *****

RELEASE AND SPILL PROCEDURES: REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.

WASTE DISPOSAL METHOD: DISPOSE OF IN ACCORDANCE WITH LOCAL REGULATIONS.

INCINERATE IN APPROVE FACILITY. DO NOT INCINERATE CLOSED CONTAINERS

HANDLING AND STORAGE PRECAUTIONS: DANGER: DO NOT TRANSPORT, USE, STORE, OR DISPOSE OF NEAR SOURCES OF HEAT OR IGNITION (INCLUDING FLAMES, SPARKS, AND HOT SURFACES. CONTAINERS EXPOSED TO DIRECT SUNLIGHT OR OTHERWISE HEATED ABOVE 120°F (49°C) MAY BURST. STORE IN A COOL DRY AREA. DO NOT PUNCTURE OR INCINERATE CANS.

OTHER PRECAUTIONS: DO NOT PUNCTURE OR INCINERATE (BURN) CANS. DO NOT

STICK PIN, NAIL OR ANY OTHER SHARP OBJECTS INTO OPENING ON TOP OF CAN.

DO NOT TASTE OR SWALLOW. DO NOT GET IN EYES, HAIR OR ON SKIN OR CLOTHING. WASH THOROUGHLY WITH SOAP AND WATER AFTER USING AND BEFORE EATING, DRINKING OR SMOKING. KEEP CONTAINER OUT OF REACH OF CHILDREN.

***** SECTION 8 - CONTROL MEASURES *****

RESPIRATORY PROTECTION: NONE UNDER NORMAL USE. AVOID BREATHING VAPORS. IN ENCLOSED AREAS USE SELF-CONTAINED BREATHING APPARATUS OR FRESH AIR SUPPLY.

VENTILATION /LOCAL EXHAUST: IF NECESSARY.

SPECIAL: N.A.

/MECHANICAL(GENERAL): RECOMMENDED

OTHER: N.A.

PROTECTIVE GLOVES: NONE UNDER NORMAL USE. EYE PROTECTION: SAFETY GLASSES.

OTHER PROTECTIVE EQUIPMENT: N.A.

WORK/HYGIENIC PRACTICES: USE WITH ADEQUATE VENTILATION.

N.A. = NOT APPLICABLE

N.D. = NOT DETERMINED

The information contained herein is based on data available to us and is accurate and reliable to the best of our knowledge and belief. However, LA-CO Industries, Inc./Markal Co. makes no representations as to its completeness or accuracy. Information is supplied upon condition that persons receiving such information will make their own determination as to its suitability for their purposes prior to use. In no event will LA-CO Industries, Inc./Markal Co. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon the information contained herein.

MSDS# A027 PRODUCT: PIERCE MOLECULAR DEEP PENETRANT - AEROSOL

MSDS# A140

***** SECTION 1 - IDENTIFICATION *****

IDENTITY: PIERCE MOLECULAR DEEP PENETRANT - LIQUID (NON-AEROSOL)	
MANUFACTURER	EMERGENCY TELEPHONE NO. Chemtrec 800-424-9300
LA-CO INDUSTRIES, INC/MARKAL COMPANY	INFORMATION TELEPHONE NO. 847-956-7600
1201 PRATT BOULEVARD	DATE PREPARED: 09-25-98
ELK GROVE VILLAGE IL 60007	SUPERSEDES ISSUE DATE 06-14-93

LABELING

HMIS: 331	NFPA: 331	WHMIS(CANADA): D-1B, B-5,
EPA HAZARDS: ACUTE, FLAMMABLE		D.O.T.: COMBUSTIBLE LIQUID
BILL OF LADING:		U.P.S.:

***** SECTION 2 - HAZARDOUS INGREDIENTS *****

INGREDIENT	C.A.S.#	OSHA PEL	ACGIH TLV	SUPERFUND	
				RQ	§
PETROLEUM NAPHTHA	8052-41-3	2900 mg/m ³	525 mgm/m ³	N.A.	N.A.
SOLVENT REFINED PARAFFINIC					
PETROLEUM OIL MIST	64741-88-4	5mg/m ³	5mgm/m ³	N.A.	N.A.

***** SECTION 3 - PHYSICAL / CHEMICAL CHARACTERISTICS *****

BOILING POINT: NOT APPLICABLE	SPECIFIC GRAVITY(H ₂ O=1): <1
VAPOR PRESSURE(mmHg): N.D.	MELTING POINT: N.A.
VAPOR DENSITY(AIR=1): >1	EVAP. RATE(butyl acetate=1): <1
SOLUBILITY IN WATER: INSOLUBLE	
APPEARANCE: AMBER LIQUID	ODOR: PETROLEUM

***** SECTION 4 - FIRE AND EXPLOSION HAZARD DATA *****

FLASH POINT (method used): 100 deg.F. FLAMMABLE LIMITS - LEL: N.A. UEL: N.A.
MINIMUM (coc)

EXTINGUISHING MEDIA: USE NATIONAL FIRE PROTECTION ASS'N (NFPA) CLASS B EXTINGUISHER (CO₂, DRY CHEM OR FOAM) DESIGNED TO EXTINGUISH NFPA CLASS 1A FLAMMABLE LIQUID FIRES.

SPECIAL FIRE FIGHTING PROCEDURES: WATER SPRAY MAY BE INEFFECTIVE. WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT BUILD-UP AND EXPLOSION WHEN EXPOSED TO EXTREME HEAT. IF WATER IS USED, FOG NOZZLES ARE PREFERABLE. WEAR GOGGLES AND SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

***** SECTION 5 - REACTIVITY DATA *****

STABILITY: STABLE
 CONDITIONS TO AVOID: N.A.
 INCOMPATIBILITY (MATERIALS TO AVOID): OXIDIZING AGENTS.
 HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE AND OTHER TOXIC FUMES.
 HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
 CONDITIONS TO AVOID: NOT KNOWN.

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ROUTES OF ENTRY: INHALATION? YES SKIN? YES INGESTION? YES

HEALTH HAZARDS:

EYES: MINOR IRRITATION.

SKIN: CAN CAUSE IRRITATION FROM PROLONGED OR REPEATED CONTACT.

INGESTION: HARMFUL OR FATAL IF SWALLOWED AND/OR ASPIRATED INTO LUNGS.

INHALATION: CAN BE HARMFUL IF HIGH CONCENTRATIONS INHALED.

CARCINOGENICITY: NTP? NO IARC? NO OSHA? NO

SIGNS AND SYMPTOMS OF EXPOSURE: RESPIRATORY IRRITATION, MUSCULAR WEAKNESS, CONFUSION, IMPAIRED COORDINATION, HEADACHE, NAUSEA, DRYING OF SKIN, EYE IRRITATION.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NOT KNOWN.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: FLUSH EYES WITH PLENTY OF WATER.

SKIN: WASH WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE.

INGESTION: DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION.

INHALATION: IF ADVERSE EFFECTS OCCUR, REMOVE TO UNCONTAMINATED AREA. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION

***** SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE *****

RELEASE AND SPILL PROCEDURES: REMOVE ALL SOURCES OF IGNITION. AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.

WASTE DISPOSAL METHOD: DISPOSE OF IN ACCORDANCE WITH LOCAL REGULATIONS.

INCINERATE IN APPROVE FACILITY. DO NOT INCINERATE CLOSED CONTAINERS

HANDLING AND STORAGE PRECAUTIONS: DO NOT STORE ABOVE 120 deg.F.

OTHER PRECAUTIONS: N.A.

***** SECTION 8 - CONTROL MEASURES *****

RESPIRATORY PROTECTION: NONE UNDER NORMAL USE. AVOID BREATHING VAPORS. IN ENCLOSED AREAS USE SELF-CONTAINED BREATHING APPARATUS OR FRESH AIR SUPPLY.

VENTILATION /LOCAL EXHAUST: IF NECESSARY.

SPECIAL: N.A.

\MECHANICAL(GENERAL): OK

OTHER: N.A.

PROTECTIVE GLOVES: NONE UNDER NORMAL USE. EYE PROTECTION: SAFETY GLASSES.

OTHER PROTECTIVE EQUIPMENT: N.A.

WORK/HYGIENIC PRACTICES: USE WITH ADEQUATE VENTILATION.

N.A. = NOT APPLICABLE

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