



MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufactured for: Kardol Quality Products 285 S. West Street Lebanon, OH 45036 Information Phone Number: (800) 252-7365 Chemtrec – 24 Hour Phone: (800) 424-9300 International 703-527-3887	Trade Name: Kardol LiquiFix Product Code: 100111,100112,100113,100114 Product Use: Lubricant, Protectant, Penetrant Date of Preparation: April 12, 2012
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SECTION 2 – HAZARDS IDENTIFICATION

Emergency Overview: Light straw colored liquid with a slight petroleum odor. Slight fire hazard (Flash Point 275°F). May cause mild eye and skin irritation. Accidental ingestion may cause gastrointestinal effects with nausea and diarrhea. Aspiration into the lungs during ingestion or vomiting may cause lung damage.

Eye Contact: May cause mild irritation with redness and tearing.

Skin Contact: Prolonged contact may cause drying and cracking of the skin.

Inhalation: Vapors or mists may cause upper respiratory tract irritation, headache, dizziness, drowsiness, anesthesia and unconsciousness.

Ingestion: Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration during swallowing or vomiting may cause lung damage.

Chronic Effects Of Overexposure: Prolonged or repeated exposure may cause dermatitis.

Carcinogenicity: None of the components is listed as a carcinogen or suspect carcinogen by NTP, IARC, ACGIH or OSHA.

Medical Conditions Aggravated By Exposure: Individuals with chronic skin disorders may be at increased risk from exposure to this material.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS #
Mineral Oil	8042-47-5
Petroleum Distillates	64742-46-7 64742-47-8

SECTION 4 – FIRST AID MEASURES

Eye Contact: Immediately flush eye with water while lifting the upper and lower lids. Get medical attention if irritation persists.

Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation develops.

Inhalation: Remove victim to fresh air. If breathing has stopped give artificial respiration. If breathing is difficult have qualified personnel administer oxygen. Get medical attention.

Ingestion: Do not induce vomiting. Get immediate medical attention by calling a Poison Control Center or hospital emergency department.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing Media: Use water fog, foam, carbon dioxide, dry chemical. Water or foam may cause frothing.

Special Firefighting Procedures: Firefighters should wear full emergency equipment and a NIOSH approved positive pressure self-contained breathing apparatus. Cool fire exposed containers and structures with water.

Unusual Fire And Explosion Hazards: At elevated temperatures containers may rupture.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled: Wear appropriate protective equipment as described in Section 8. Dike spill and collect into closable containers for disposal with an inert absorbent. Prevent entry in storm sewers and waterways. Report spill as required by local and federal regulations.

SECTION 7 – HANDLING and STORAGE

Avoid eye and prolonged/repeated skin contact. Avoid breathing vapors and mists. Wash thoroughly after handling. Remove oil-soaked clothing and launder before re-use. Discard oil soaked shoes and other items that cannot be laundered.

Protect containers from physical damage. Store in a cool area away from oxidizers.

Empty containers retain product residues. Do not cut, weld, braze, etc. on or near empty containers. Follow all MSDS precautions in handling empty containers.

SECTION 8 – EXPOSURE CONTROLS and PERSONAL PROTECTION

INGREDIENTS	CAS#.	EXPOSURE LIMITS
Mineral Oil	8042-47-5	5 mg/m3 TWA OSHA PEL (as Oil Mist)
Petroleum Distillates	64742-52-5 64742-47-8	5 mg/m3 TWA OSHA PEL (as Oil Mist)

THE FOLLOWING CONTROLS ARE RECOMMENDED FOR NORMAL CONSUMER USE OF THIS PRODUCT

Engineering Controls: Use in a well-ventilated area.

PERSONAL PROTECTION:

Eye Protection: Avoid eye contact. Safety glasses or goggles recommended.

Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where prolonged skin contact is likely.

Respiratory Protection: None needed for normal use with adequate ventilation.

FOR BULK PROCESSING OR WORKPLACE USE THE FOLLOWING CONTROLS ARE RECOMMENDED

Engineering Controls: Provide adequate general or local exhaust ventilation to maintain vapor concentrations below the exposure limits.

PERSONAL PROTECTION:

Respiratory Protection: Use NIOSH approved respirator with organic vapor cartridges or supplied air respirator if needed. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

Eye Protection: Safety glasses or goggles recommended if splashing is possible. .

Protective Clothing: Rubber or other impervious gloves are recommended where prolonged or repeated skin contact is likely.

Other Protective Equipment: For operations where contact can occur, an eye wash facility should be immediately available.

SECTION 9 – PHYSICAL and CHEMICAL PROPERTIES

Boiling Point: 450°F (232°C)

Specific Gravity (H₂O=1): 0.86

Vapor Pressure (@ 20 C Mm Hg): 1.0

Evaporation Rate (Butyl Acetate=1): 1.1

Solubility In Water: Negligible

Flash Point: 275°F/154°C

Flammable Limits: (Vol % In Air)

LEL: 0.5 (Petroleum Distillate)

UEL: 4.8 (Petroleum Distillate)

Appearance And Odor: Light straw colored liquid with a mild petroleum odor.

Melting Point: Not Available

Voc: 77 G/L

Vapor Density (Air=1): Less Than 1

Coefficient Of Water/Oil: Not Available

Volatile: 8.9%

Autoignition Temperature: Not Determined

SECTION 10 – STABILITY and REACTIVITY

Stability: This material is stable.

Conditions To Avoid: Avoid excessive heat.

Incompatibility: Avoid strong oxidizers and strong acids.

Hazardous Decomposition Products: Thermal decomposition may yield carbon monoxide, carbon dioxide and hydrocarbons.

Hazardous Polymerization: Will not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

This product is not classified as acutely toxic based on established criteria. It may present an aspiration if swallowed. None of the components of this product is listed as a carcinogen or suspected carcinogen or is considered a reproductive hazard.

Acute Toxicity Values: Product: Oral rat LD50 > 5 g/kg; Dermal rabbit LD50 2 g/kg

SECTION 12 – ECOLOGICAL INFORMATION

There is no ecotoxicity data available for this product at this time.

SECTION 13 – DISPOSAL CONSIDERATIONS

This product as sold does not meet the definition of a US EPA hazardous waste. Dispose in accordance with all local, state and federal regulations.

SECTION 14 – TRANSPORTATION INFORMATION

This product is not regulated for transportation by the US DOT, Canadian TDG, IATA/ICAO or IMDG.

SECTION 15 – REGULATORY INFORMATION

OSHA Hazard Classification: Not hazardous

EPA SARA 302: This product does not contain chemicals regulated under SARA Section 302.

EPA SARA 311 Hazard Classification: Not hazardous

EPA SARA 313: This product contains the following chemicals that are regulated under SARA Title III, section 313:
None

California Proposition 65: This product is not known to contain any chemicals which are known to the State of California to cause cancer or reproductive harm.

Toxic Substances Control Act: All of the components of this product are listed on the TSCA inventory.

Canadian Environmental Protection Act: All of the components of this product are listed on the Canadian Domestic Substances List (DSL).

WHMIS Classification: Not a controlled product.

This product has been classified in accordance with the hazard criteria in the CPR and the MSDS contains all the information required by the CPR.

Australian Inventory of Chemical Substances: All of the components of this product are listed on the AICS Inventory.

Inventory of Existing Chemical Substances Of China: All of the components of this product are listed on the Chinese IECSC.

European Inventory Of Commercial Chemical Substances: All of the components of this product are listed on the EINECS Inventory.

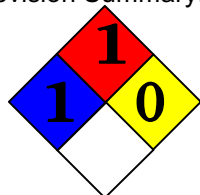
Japanese Existing and New Chemical Substances: All of the ingredients of this product are listed on the Japanese ENCS.

Korean Existing Chemical List: All of the components of this product are listed on the KECL Inventory.

Philippine Inventory of Chemicals And Chemical Substances: All of the components of this product are listed on the PICCS.

SECTION 16 – OTHER INFORMATION

Revision Summary: Change in formulation. Revisions to Sections 2, 5, 8, 9, 11, 15.



NFPA

1	HEALTH
1	FLAMMABILITY
0	REACTIVITY

HMIS

N/A = Not applicable

NDA = No data available

NEG. = Negligible

< = Less Than

> = More than

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