

LARK V

Release Agent

Specification Sheet

1. PRODUCT NAME

LARK V Release Agent

2. MANUFACTURER

KARLSON FORMING
P.O. Box 171
Amery, WI 54001
715-268-2505
(FAX) 715-268-2511

3. PRODUCT DESCRIPTION

Basic Use: LARK V permits easy stain-free removal of forms, form-liners, pallets, etc. from hardened concrete. It:

- Cuts form clean-up time up to 70% when properly applied
- Can reduce bugholes on concrete surfaces
- Doesn't interfere with adhesion of caulk, architectural coatings, paint, sealers and curing compounds on cured concrete surfaces when properly applied
- Is excellent on aluminum forms
- Can be applied in sub-freezing or very hot temperatures
- Reduces incidences of skin rashes to an absolute minimum
- Promotes longer life of plywood forms by acting as a water repellent from inside the wood
- Can produce both high visual impact and typical concrete surfaces
- Increases volume that may be stored and simplifies DOT driver and HazMat regulations
- Even when 10 times more than required is applied:
 - No staining when cured at ambient temperatures
 - Concrete surfaces are not "killed"
 - Does not cause efflorescence
 - The visual impact worsens

Limitations: a. Not recommended for forms or formliners made from expanded polystyrene, SBR, natural rubber or latexes made of these.

TABLE OF PROPERTIES

Color	Straw
Opacity	Clear
Freeze Temperature	-20°F (-29°C)
Freeze Damage	None
Flash Point	320°F (160°C)
Viscosity (centipoises)	20 @ 68°F (20°C)
Solids	None
Pounds per gallon	7.37
VOC	245 g/L

Composition: A proprietary blend of vegetable oils in mineral oil. Contains no waxes, no silicones...no carcinogens.

b. Although subfreezing temperatures have no effect on the releasing action of LARK V, temperatures below freezing promote film thicknesses which do cause more bugholes.

Applicable Standards: LARK V Release Agent meets U.S. Army, Corps of Engineers CE-204, Section 7.10 and CE 1401.01, Section 17.4.

4. TECHNICAL DATA

Please see Tables.

5. APPLICATION

Preparatory Work: Form surfaces should be clean, dry, and free from contaminants. Apply LARK V just minutes before concrete is placed or up to 14 days before if treated surface is protected.

Methods: Your choice of application methods will determine the final appearance of the concrete. For best overall performance, including lowest cost, spray apply with a Spraying Systems 8001 fan spray tip.

Release Method: Apply with any type applicator or technique. Use a sprayer, roller, brush, or mop.

Too much release agent will cause bugholes and "wormtracks" and an increased difficulty in stripping.

Dilution with fuel oil, diesel fuels, or mineral spirits will promote an increase in stripping difficulties, concrete build-up, bugholes, soft spots, and staining.

Storage: Factory sealed containers will keep up to 2 years at temperatures from -20°F to 140°F (-30°C to 60°C). LARK V is a class 3B liquid for purposes of meeting OSHA storage requirements, which means much more may be stored under roof. (Section 1910.106.)

Store drums horizontally to prevent standing water from collecting over the bungs.

COVERAGE WITH LARK V

Form Surface	(sq ft/gal)
Hard & Smooth	1,500
Pre-oiled Plywood	1,000
Untreated Plywood	700

Precautions: Keep out of reach of children. Avoid prolonged contact with the skin. Use with adequate ventilation. See Safety Data Sheet for additional information.

TABLE OF FORM AND FORMLINER COMPATIBILITY

Plywood	All Grades, Pre-oiled, Overlaid (LDO, MDO, HDO)
Plastics	Fiberglass Reinforced, ABS, PVC
Coatings	Epoxy, Urethane
Elastomerics	Urethane, Silicone
Steel	
Aluminum	
Wood	

6. AVAILABILITY AND COST

Availability: LARK V is available in 1 and 5 gallon containers; orange and white striped 55 gallon drums and 275 gallon MegaPaks. Contact KARLSON FORMING for your nearest distributor.

7. LIMITED WARRANTY

KARLSON FORMING, INC. warrants the product against defects in materials for a period of 1 year from purchase. If KARLSON FORMING receives notice of such defects during the warranty period, KARLSON FORMING at its option will either replace the product or refund the purchase price. THE WARRANTY SET FORTH ABOVE IS EXCLUSIVE AND NO OTHER WARRANTY, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED. KARLSON FORMING SPECIFICALLY DISCLAIMS THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE REMEDIES PROVIDED HEREIN ARE BUYER'S SOLE AND EXCLUSIVE REMEDIES. IN NO EVENT SHALL KARLSON FORMING, INC. BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING LOSS OF PROFIT) WHETHER BASED ON CONTRACT, TORT OR ANY OTHER LEGAL THEORY.

8. MAINTENANCE

Not required.

9. TECHNICAL SERVICES

To keep you abreast of new ideas in the development, selection and application techniques of release agents, we publish newsletters, technical brochures, specification sheets and Safety Data Sheets.

SAFETY DATA SHEET

KARLSON FORMING
P.O. BOX 171 AMERY, WI 54001

Section - 1 IDENTIFICATION

PRODUCT NAME: LARK V Release Agent

CHEMICAL FAMILY: Hydrocarbon Mixture CAS#: Not applicable to this mixture.
DISTRIBUTOR TELEPHONE NUMBER: 715-268-2505
EMERGENCY PHONE NUMBERS: 800-424-9300 CHEMTREC
(Transportation Emergencies)

Section - 2 HAZARDS INFORMATION

GHS Classification: Aspiration Hazard – Category 1
Signal Word: DANGER!
Hazard Statements: May cause skin irritation.
May be fatal if swallowed and enters airways.

GHS Pictogram:



Precautionary Statement:

Prevention: Wear protective gloves if prolonged contact cannot be avoided. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash hands thoroughly after handling.

Response: Collect spillage. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing before reuse. If skin irritation occurs: Get medical attention.

Storage: Keep container tightly closed.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section - 3 COMPOSITIONAL INFORMATION

<u>CAS#</u>	<u>INGREDIENTS</u>	<u>%</u>
N/A	Fatty Acid Blend	2-5
64742-53-	Hydrotreated Naphthenic Distillate (Mineral Oil)	90-95

Section - 4 FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 – minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation persists.

Inhalation: Move exposed person to fresh air.

Section - 4 FIRST AID MEASURES (continued)

- Ingestion: Do NOT induce vomiting. If conscious rinse out mouth with water.
- Symptoms (Acute and delayed): Exposure to high concentrations of vapors may cause irritation to the eyes, nose and throat, nausea and dizziness.
- Note to Physicians: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section - 5 FIREFIGHTING PROCEDURES AND EXTINGUISHING MEDIA

- Suitable Extinguishing Media: Use dry chemical, CO₂, water spray (FOG) or foam.
- Unsuitable Extinguishing Media: Avoid solid water stream as it may scatter and spread fire.
- Specific Hazards Arising from Chemical: Elevated temperatures can lead to the formation of irritating vapors. Decomposing products may include the following materials: Carbon Dioxide and Carbon Monoxide. This product is a static accumulating liquid. Static accumulating liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor may cause flash fire.
- Protective Equipment/Precautions: Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section - 6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- Environmental Precautions: Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.
- Methods for Containment: Stop leak if without risk. Use absorbent pads or earthen dams to contain.
- Methods for Cleanup: A vapor suppressing foam may be used to reduce vapors. Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled container.

Section - 7 HANDLING AND STORAGE

- Handling Procedures: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Use non-sparking tools.
- Shipping and Storing Procedures: Store in accordance with local regulations. Keep in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials. Do not store in unlabeled containers. Store and use away from heat, sparks, open flame or any other ignition source. Empty containers that retain product residue may be hazardous
- Incompatibilities: Oxidizing Agents.

Section - 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits:

Mineral Oil Mists:

ACGIH TLV: TWA: 5 mg/m³ 8 hours

Section - 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

OSHA PEL: TWA: 5 mg/m³ 8 hours
 NIOSH REL: TWA: 5 mg/m³ 10 hours

Engineering Controls: Material should be handled in enclosed vessels and equipment. Use only in adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Eye/Face Protection: Chemical goggles and face shield.

Skin Protection: Chemical resistant, impervious gloves complying with an approved standard should be worn. Coveralls, apron and boots as necessary to minimize contact.

Respiratory Protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicated this is necessary. Respirator selection must be based on known or anticipated exposure levels.

General Hygiene: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

Section - 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear straw colored liquid	Decomposition Temperature:	Not determined
Vapor Pressure:	Not determined	Odor:	Mild hydrocarbon odor
Odor Threshold:	Not determined	Vapor Density:	Not determined
pH:	Not determined	Relative Density:	Not determined
Melting Point/Freezing Point:	-20°F (-29°C)	Solubility:	Not soluble in water
Initial Boiling Point & Boiling Range:	Not determined	Flash Point:	320°F (160°C)
Evaporation Rate:	Not determined	Specific Gravity:	0.885
Flammability (solid, gas):	Not determined	Pounds per Gallon:	7.37
Upper/Lower Flammability or Explosive Limits:	Not determined	VOC:	245 g/L
Partition Coefficient n-octanol/water:	Not determined	Viscosity:	15 @ 68°F (20°C)
Auto-Ignition Temperature:	Not determined		

Section - 10 STABILITY AND REACTIVITY

Reactivity: Polymerization will not occur.

Chemical Stability: Stable under normal conditions.

Hazardous Reactions: None.

Conditions to Avoid: High temperatures, flames, sparks.

Incompatibility: Strong acids and oxidizing materials.

Hazardous Decomposition Products: Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

Section - 11 TOXICOLOGICAL INFORMATION

Acute Exposure:

Respiratory Reactions: An inhalation hazard may only arise if product is used in aerosol conditions or if heated up. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and upper respiratory tract.

Eye Irritation: Causes mild eye irritation that is reversible with proper care.

Skin Irritation: May cause mild skin irritation that is reversible with proper care.

Sensitization: Not expected to cause skin or respiratory sensitization.

Aspiration Hazard: If swallowed can be aspirated into lungs and cause chemical pneumonia, varying degrees of pulmonary injury or death. If swallowed, DO NOT induce vomiting.

Section - 11 TOXICOLOGICAL INFORMATION (continued)**Chronic Exposure:**

Inhalation: Vapor/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects including death.

Carcinogenicity: No data available to indicate product or any components present at greater than .1% are carcinogenic.

Section - 12 ECOLOGICAL INFORMATION

Persistence & Degradability: Inherently biodegradable.

Bioaccumulation Potential: Not available.

Soil Mobility: Not available.

Other Adverse Effects: Not available.

Section - 13 DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

Section - 14 TRANSPORTATION INFORMATION

	DOT Classification	TDG Classification	IMDG	IATA
UN Number	Not regulated	Not regulated	Not regulated	Not regulated

Section - 15 REGULATORY INFORMATION

All components of this product are listed on the TSCA Inventory.

Section - 16 OTHER INFORMATION

The information and recommendations contained herein are, to the best of Karlson Forming's knowledge and belief, accurate and reliable as of the date issued. Karlson Forming does not warrant or guarantee their accuracy or reliability, and shall not be liable for any loss or damage arising out of the use thereof. The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use.