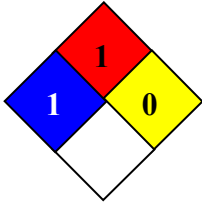


MATERIAL SAFETY DATA SHEET

KURT J. LESKER COMPANY

KJLSS15, KJLSS19, KJLSS20, KJLSS70

Section I- Product and Company Identification

Kurt J. Lesker Company 1925 Worthington Avenue Clairton, PA 15025		Emergency Phone Numbers: CHEMTREC (USA) 800-424-9300 Outside the USA 703-527-3887 collect calls accepted Poison Center (USA) 800-222-1222									
Business Phone: 412-387-9200; Business Fax: 412-384-2745		Date of Last Revision: 07/22/2011ewr									
Chemical Name and Synonyms: <i>KJLSS15, KJLSS19, KJLSS20, KJLSS70</i>											
CAS Number <i>Mixture</i>	Chemical Family: <i>Semi-synthetic Hydrocarbon</i>	Product Codes: KJLSS[15;19; 20; 70] Q1, G1, G5, G55									
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px 5px; margin-bottom: 5px;">NFPA</div>  </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px 5px; margin-bottom: 5px;">HMIS</div> <table border="1" style="margin: 0 auto; text-align: center; font-weight: bold;"> <tr><td style="background-color: blue; color: white;">HEALTH</td><td>1</td></tr> <tr><td style="background-color: red; color: white;">FIRE</td><td>1</td></tr> <tr><td style="background-color: yellow;">REACTIVITY</td><td>0</td></tr> <tr><td>PPE</td><td>B</td></tr> </table> </div> </div>				HEALTH	1	FIRE	1	REACTIVITY	0	PPE	B
HEALTH	1										
FIRE	1										
REACTIVITY	0										
PPE	B										

Section II- Composition / Information on Ingredients

Name	CAS#	Concentration
*Severely Hydrotreated & hydrocracked petroleum base oil	Mixture	0- 100%
*Base oil may contain the following CAS numbers: 8042-47-5; 64742-46-7; 64742-47-8; 64742-53-6; 64742-54-7; 64742-55-8; 72623-84-8; 72623-85-9; 72623-86-0; 72623-87-1; 178603-64-0; 178603-65-1; 178603-66-2; 445411-73-4		

Section III- Potential Health Hazards

<u>Emergency Overview:</u> Clear viscous fluid. No specific hazards Protect eyes from mists or sprays. Protect skin from repeated or prolonged exposure. Do not store in opened or unmarked containers Spills create a slip hazard. Follow good industrial hygiene practice Do not ingest.
Major routes of entry: Eye, Skin, Inhalation, Ingestion <u>Effects of Overexposure:</u> <u>Eye Contact:</u> Slightly irritating to eyes <u>Skin Contact:</u> Slightly irritating to eyes <u>Inhalation:</u> No known significant effects or critical hazards <u>Ingestion:</u> No known significant effects or critical hazards <u>Chronic Health Effect Summary:</u> No known significant effects or critical hazards <u>Conditions Aggravated By Exposure:</u> Repeated skin contact may cause local skin destruction or dermatitis. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation <u>Carcinogenic Potential:</u> This product is not known to contain any components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC, or NTP <u>OSHA HAZARDOUS CLASSIFICATION (29CFR1910.1200)</u> <u>OSHA Health Hazards:</u> Irritant: No; Toxic: No; Corrosive: No; Sensitizer: No; Highly Toxic: No; Carcinogenic: No <u>OSHA Physical Hazards:</u> Combustible: No; Flammable: No; Compressed Gas: No; Explosive: No; Oxidizer: No; Organic Peroxide: No; Pyrophoric: No; Water-reactive: No; Unstable: No

Section IV- First Aid Measures

Eye Contact: Flush eyes for 15 minutes w/ water, retracting eyelid often. Seek medical attention if irritation persists

Skin Contact: Wash thoroughly w/ mild soap & water. Flush w/ lukewarm water for 15 minutes. Remove and clean oil soaked clothing. Discard contaminated leather goods. Seek medical attention if irritation persists. If material is injected seek medical attention immediately. If burned by hot material cool with water. Seek medical attention.

Inhalation: Not expected to be a problem. However, if symptoms of irritation, discomfort, or overcome, remove to fresh air. Give oxygen or artificial respiration as needed. Seek immediate medical assistance

Ingestion: Do not induce vomiting and do not give anything to drink unless directed by a medical physician. Seek medical attention if large quantities are swallowed or irritation or discomfort occurs.

Note To Physician: SKIN: In the event of injection in underlying tissue, immediate treatment should include extensive incision, debridement and saline irrigation. Inadequate treatment can result in ischemia and gangrene. Early symptoms may be minimal.

Ingestion, inhalation or skin contact: treat symptomatically. Contact poison center if large quantities are ingested or inhaled

Section V- Fire Fighting Measures

Flash Point	Autoignition Temperature	Flammability	Lower Explosive Limit	Upper Explosive Limit
>=220C [COC]	ND	Combustible at high temperature- limits not available	ND	ND
Extinguishing Media: Use dry chemical, foam, carbon dioxide or water fog. Note Carbon dioxide and inert gas can displace oxygen. Observe caution when fighting fires in enclosed spaces.				
Special fire-fighting procedures: Water or foam may cause frothing. Use water to cool fire exposed containers. Use water spray to flush spills away from exposure. Prevent runoff from entering streams, sewers, or drinking water supply.				
Unusual Fire Hazards: This material will burn but will not readily ignite. This material will release vapors when heated above the flash point temperature that can ignite when exposed to an ignition source. In an enclosed space heated vapors can cause an explosion. Mists or sprays may burn at temperatures below the flash point.				
Fire Fighting Procedure: Use SCBA and full turn out gear to fight fires. Combustion products include fumes, smoke, carbon oxides, unburned hydrocarbons, and trace oxides of sulfur and nitrogen				
Special Remarks-Explosion Hazard: Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Do not expose containers to heat or an ignition source				

Section VI- Accidental Release Measures

Do not touch damaged containers or spilled materials without proper PPE.

In case of release or spill, shut off source and contain material for collection. Absorb released material w/ sand or similar absorbent. Place material into a covered container for disposal. Dispose of according to applicable local, state, federal regulations.

This material will float on water. Prevent runoff from entering streams, sewers, or drinking water supply. If the spill reaches a water source immediately notify the US Coast Guard and the EPA

Section VII- Handling and Storage

Avoid contamination and extreme temperatures. Observe good hygiene practices. Avoid breathing mists and vapors. Avoid contact with skin and eyes.

Wash hands after use and before handling food or applying cosmetics. Do not use tobacco products in the immediate area.

Keep containers closed. Keep away from heat, sparks, flames, and strong oxidants. Do not store near combustible material, or oxidizing materials. Prevent and clean small spills immediately to prevent a slip hazard.

Keep container tightly closed. Store in a cool, dry, well ventilated area.

Empty drums retain liquid residues and/or vapors. Do not cut, weld, braze, solder, or expose drum to heat, flame, sparks, static electricity, or other ignition sources. EXPLOSION MAY OCCUR RESULTING IN SERIOUS INJURY OR DEATH.

Do not reuse drum. Drain empty drums completely, properly bung and return to a drum reconditioner. Dispose of used drums in accordance with all applicable state and federal regulations.

Section VIII- Exposure Controls, Personal Protective Equipment

Respiratory Protection: Good general ventilation should be adequate. If vapors or mists occur, or ventilation is inadequate use NIOSH/ MSHA approved respirators with organic vapor filter cartridges are recommended. Observe respirator limitations as listed by NIOSH/ MSHA and the equipment manufacturer.

The following limits for mist/ aerosol occurrence are recommended(as oil mist): 5mg/m³ ACGIH TLV, 10mg/m³ ACGIH STEL; 5mg/m³ OSHA PEL

Eye Protection: ANSI Z87.1 approved safety glasses with side shields or equivalent; or chemical splash goggles. Face shields are recommended if material is heated above 125F (51C)

Skin Protection: Lab coat. For splash or liquid contact use oil resistant gloves and other protective clothing (Tyvex or neoprene) and protective boots

Other Protective Equipment: Safety shower and eyewash should be located near the workplace. Observe good personal hygiene practices. Wash hands and exposed areas with soap and water before eating, drinking, smoking or using toilet facilities and before leaving the work place. Do not use gasoline, kerosene, solvents, or harsh abrasives as skin cleaners. Observe exposure limits for mists and aerosols.

Ventilation Requirement: Local Exhaust Process away from operator at a rate of 50 feet per minute when vapors or mist are generated.

Note: Emissions from ventilation should be confirmed to ensure compliance to environmental air quality requirements as set forth by state and local jurisdictions. In some cases the use of scrubbers, filters, or engineering modifications to process equipment may be necessary to reduce emissions to acceptable levels.

Section IX- Physical And Chemical Properties

Boiling Point (°C) : ND	Relative Density @15°C(kg/L) : 0.861-0.862 (water=1)
Vapor Pressure : < 0.01 mmHg @ 20°C	% Volatile by Volume : Negligible
Flash Point (open cup) : >=220°C (428°F) Cleveland Open Cup	Vapor density : >1 (Air=1)
Solubility in Water : insoluble in water	Odor : Mild petroleum
Color & Appearance : Clear viscous liquid	Odor Threshold : ND
pH : ND	Viscosity (cSt @ 40°C) : SS15=38.1; SS19=55; SS20=103; SS70=70
Pour Point (°C) : SS15=-18; SS19=-15; SS20=-12 SS70=-12	Viscosity (cSt @ 100°C) : SS15=6.2; SS19=7.6; SS20=11.4 VI: SS15=108; SS19=100; SS20=97; SS70=97

Section X- Stability And Reactivity

<u>Stability</u> : This material is stable <u>Hazardous Polymerization</u> will not occur	<u>Conditions To Avoid</u> : Avoid extreme heat, sparks, open flame
<u>Incompatibility (materials to avoid)</u> : Strong oxidizers, reducing agents, acids, alkalis <u>Hazardous Decomposition Products</u> : see section V	

Section XI- Toxicological Information

Section IV: Toxicological Information

Product/ Ingredient Name: Mixture of severely Hydrotreated and hydrocracked petroleum base oil				
<u>Acute Toxicity:</u>	Method	Species	Dose	Exposure
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation	Rat	>2500 mg/m ³	4 hours [Dust and mist inhalation]
<u>Conclusion /Summary:</u> Not available				
<u>Chronic Toxicity:</u> Conclusion /Summary: Not available				
<u>Irritation/Corrosion:</u> Conclusion /Summary: Not available				
<u>Sensitizer:</u> Conclusion /Summary: Not available				
<u>Carcinogenicity:</u> Conclusion /Summary: Not available				
<u>Mutagenicity:</u> Conclusion /Summary: Not available				
<u>Teratogenicity:</u> Conclusion /Summary: Not available				
<u>Reproductive Toxicity:</u> Conclusion /Summary: Not available				

Section XII- Ecotoxicological Information

<u>Environmental effects</u> : No known significant effects or critical hazards
<u>Aquatic ecotoxicity</u> : Conclusion /Summary: Not available
<u>Biodegradability</u> : Conclusion /Summary: Not available
<u>Other adverse effects</u> : none known

Section XIII- Disposal Considerations

<u>Waste Disposal</u> :. Hazardous characteristics and waste stream classification may change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, and treatment and or disposal methodologies for spent materials and residues at the time of disposition. Conditions of use may cause this material to become a hazardous waste as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a RCRA “hazardous waste” at the time of disposal. Transportation, treatment, storage, and disposal of waste materials must be conducted in accordance with RCRA regulations (CFR40 260-271). Note State and local regulations may be more restrictive. Contact your local EPA Regional office for guidance concerning specific disposal issues. This product must be disposed of in accordance with all applicable local, state and federal regulations

Section XIV- Transportation Information

<u>Shipping Class</u> : US DOT STATUS: not regulated by US Department of Transportation as a hazardous material.
<u>Proper Shipping Name</u> : Not regulated; <u>Hazard Class</u> : Not Regulated , <u>Packing Group</u> : N/A.; <u>UN/NA Number</u> : Not regulated
<u>Reportable Quantity</u> : A reportable quantity (RQ) has not been established for this product
<u>Emergency Response Guide No</u> : N/A
<u>MARPOL III Status</u> : not a DOT” Marine Pollutant” per 49 CFR 171.8

Section XV- Regulatory Information

United States HCS Classification: Not regulated

Canadian WHMIS Classification: Not controlled under WHMIS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by Controlled Products Regulations

EU Regulations / Risk phrases: This product is not classified according to EU legislation.

International Inventories:

United States TSCA: All components are listed or exempted

Canadian Inventory: All components are listed or exempted

European Inventory: All components are listed or exempted

Section XVI- Additional Information

For additional information : fluids@lesker.com

ND= No Data Available NA= Not Applicable

Kurt J. Lesker Company ("KJLC") believes the information contained in this Material Safety Data Sheet is accurate as of the "Date of Last Revision" specified. The information relates only to typical properties of the product. Do not use the information for product performance or specification purposes. The information is for use by technically skilled persons at their own risk. **KJLC MAKES NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE PRODUCT OR THE INFORMATION.** The information may not be valid for product use in combination with any other product or material or in any process. KJLC expressly disclaims any liability arising from any use of the product or any reliance on the information. Do not treat the information (a) as assurance that use of the product will not infringe patent or other rights or (b) as a license or grant of patent or other property rights. "KJLC" means KJLC and each of its subsidiaries