SAFETY DATA SHEET

KL-5 Vacseal Leak Sealant (Liquid)

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: KL-5 Vacseal Leak Sealant (Liquid)
GENERAL USE: Sealing leaks in vacuum systems

MANUFACTURER
Kurt J Lesker Company
United States
1925 Route 51
Jefferson Hills, PA 15025

Customer Service: 412-387-9200
E-Mail: msds@lesker.com

Kurt J Lesker Company LTD
United Kingdom
15-16 Burgess Road
Hastings, East Sussex, TN35 4NR

Customer Service: +44 (0) 1424 458100

24 HR. EMERGENCY TELEPHONE NUMBERS

24-Hour Emergency Response provided by
3E Global Incident Response Hotline

When calling, refer to Kurt J Lesker Company
Global Response Access Code: 333594

North America [USA, Canada, Mexico]: 1-866-519-4752
Mainland China: (+86) 4001 2001 74
Europe: {int'l call prefix}-1-760-476-3961
Asia Pacific: {int'l call prefix}-1-760-476-3960
Middle East & Africa: {int'l call prefix}-1-760-476-3959

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:
- Carcinogenicity, Category 1B
- Mutagenicity, Category 2
- Acute Toxicity (Inhalation), Category 4
- Acute Toxicity (Dermal), Category 4
- Eye Irritation, Category 2
- Skin Irritation, Category 2
- Target Organ Toxicity (Single exposure), Category 3

Environmental:
- Acute Hazards to the Aquatic Environment, Category 1
- Chronic Hazards to the Aquatic Environment, Category 3

Physical:
- Flammable Liquids, Category 3

GHS LABEL

Flame | Environment | Health hazard | Exclamation mark
HAZARD STATEMENTS

H226: Flammable liquid and vapour.
H350: May cause cancer.
H341: Suspected of causing genetic defects.
H332: Harmful if inhaled.
H312: Harmful in contact with skin.
H319: Causes serious eye irritation.
H315: Causes skin irritation.
H335: May cause respiratory irritation.
H410: Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENT(S)

Prevention:

P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P273: Avoid release to the environment.

Response:

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P391: Collect spillage.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Colorless or pale yellow liquid
IMMEDIATE CONCERNS: Flammable liquid and vapor.

POTENTIAL HEALTH EFFECTS

EYES: Causes eye irritation.
SKIN: Causes skin irritation.
SKIN ABSORPTION: Harmful if absorbed through the skin.
INGESTION: May be harmful if swallowed.
INHALATION: Harmful if inhaled. Causes respiratory tract irritation.

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: Not Available

CARCINOGENICITY: IARC Group 2A - Probably carcinogenic to humans.
MUTAGENICITY: Suspected of causing genetic defects.
ROUTES OF ENTRY: Inhalation, ingestion, eye contact, or skin contact.
TARGET ORGAN STATEMENT: Liver, Central nervous system, Heart
IRRITANCY: May cause irritation of skin, eyes, and respiratory tract.
PHYSICAL HAZARDS: Flammable liquid and vapor.

3. COMPOSITION / INFORMATION ON INGREDIENTS
### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

**SKIN:** Wash with soap and water. Get medical attention if irritation develops or persists.

**INGESTION:** If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

**SIGNS AND SYMPTOMS OF OVEREXPOSURE**

**INHALATION:** Headache, dizziness

### 5. FIRE FIGHTING MEASURES

**FLAMMABLE CLASS:** Flammable liquid and vapour.

**EXTINGUISHING MEDIA:** Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

**EXPLOSION HAZARDS:** Flammable Liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point.

**FIRE FIGHTING PROCEDURES:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hydrogen chloride.

### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Clean up spills immediately, observing precautions in Protective Equipment section.

**LARGE SPILL:** Collect spilled material in appropriate container. Spill may be reportable. Consult section 15 for Reportable Quantities.

**ENVIRONMENTAL PRECAUTIONS**

**WATER SPILL:** This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

**GENERAL PROCEDURES:** Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Eliminate all ignition sources if safe to do so. Avoid formation of dust. Provide appropriate exhaust ventilation where dust is formed. Avoid breathing (dust, vapor, mist, gas). Practice good chemical hygiene during and after use. Avoid release to the environment.

### 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** To avoid risks to human health and the environment, comply with the instructions for use.

**HANDLING:** Keep away from heat and flame. Avoid formation of dust. Provide appropriate exhaust ventilation where dust is formed. Do not breath (dust, vapor, mist, gas). Avoid contact with eyes, skin, and clothing. Wash
thoroughly after handling.

**STORAGE:** Keep container closed when not in use. Store in a cool dry place.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**PERSONAL PROTECTIVE EQUIPMENT**

**EYES AND FACE:** Wear safety glasses with side shields (or goggles) and a face shield.

**SKIN:** Wear protective gloves/protective clothing/eye protection/face protection. Wash contaminated clothing before reuse.

**RESPIRATORY:** If ventilation is inadequate and this material is handled at elevated temperatures or dusts/fumes/mists are generated a NIOSH/MSHA approved air purifying respirator with a manufacturers approved cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

**WORK HYGIENIC PRACTICES:** Practice good chemical hygiene during and after use.

**COMMENTS:**

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<th>Location, Type</th>
<th>Value (ppm)</th>
</tr>
</thead>
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<td>Canada - PQ TWA</td>
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9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Solid

**ODOR:** Solvent
COLOR: Pale Yellow or Clear
pH: Not Available
PERCENT VOLATILE: Not Available
FLASH POINT AND METHOD: Not Available
AUTOIGNITION TEMPERATURE: Not Available
VAPOR PRESSURE: Not Available
VAPOR DENSITY: Not Available
BOILING POINT: Not Available
MELTING POINT: Not Available
SOLUBILITY IN WATER: Not Available
DENSITY: Not Available
VIScosity: Not Available

10. STABILITY AND REACTIVITY

STABLE: Yes
HAZARDOUS POLYMERIZATION: No
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride.
INCOMPATIBLE MATERIALS: Strong acids, Strong bases, Oxidizing materials.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD<sub>50</sub>: Not Available
SKIN ABSORPTION: Not Available
ORAL LD<sub>50</sub>: Not Available
INHALATION LC<sub>50</sub>: Not Available

CARCINOGENICITY

IARC: Group 2A - Probably carcinogenic to humans.
NTP: Reasonably anticipated to be a human carcinogen.
OSHA: Listed

REPRODUCTIVE EFFECTS: Not Available
TERATOGENIC EFFECTS: Not Available
MUTAGENICITY: Suspected of causing genetic defects.

12. ECOLOGICAL INFORMATION

BIOACCUMULATION/ACCUMULATION: Not Available
AQUATIC TOXICITY (ACUTE)

96-HOUR LC<sub>50</sub>: 40.7 mg/L (Pimephales promelas)
48-HOUR EC₅₀: 59 ug/L (Daphnia magna)

CHEMICAL FATE INFORMATION: Not Available

COMMENTS: The preceding data is for trichloroethylene.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of according to applicable federal, state, provincial, and local regulations.

PRODUCT DISPOSAL: This material and its container must be disposed of as hazardous waste. Contact a licensed waste disposal company.

EMPTY CONTAINER: Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Resin solution, flammable

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: 1866

PACKING GROUP: III

MARINE POLLUTANT #1: Not a DOT 'Marine Pollutant' per 49CFR 171.8

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Resin solution, flammable

UN NUMBER: 1866

HAZARD CLASS: 3

PACKING GROUP: III

AIR (ICAO/IATA)

SHIPPING NAME: Resin solution, flammable

UN/NA NUMBER: 1866

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: III

VESSEL (IMO/IMDG)

SHIPPING NAME: Resin solution, flammable

UN/NA NUMBER: 1866

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: III

EmS: F-E, S-D

MARINE POLLUTANT #1: No

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Resin solution, flammable
15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)


313 REPORTABLE INGREDIENTS: Ethylbenzene, Trichloroethylene, Xylene

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: 100 lbs

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All components of this product are included in inventory, exempt, or notified

REGULATIONS

STATE REGULATIONS:

The following components appear in one or more of the following state hazardous substances lists

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<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
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<td>Yes</td>
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<tr>
<td>Trichloroethylene</td>
<td>79-01-6</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Xylenes (mixed)</td>
<td>1330-20-7</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</tr>
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</table>

CALIFORNIA PROPOSITION 65: This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm and may be subject to the requirements of California Proposition 65 (CA Health and Safety Code section 25249.5) : Ethylbenzene, Trichloroethylene

CANADA

DOMESTIC SUBSTANCE LIST (INVENTORY): All components of this product are included in inventory, exempt, or notified

16. OTHER INFORMATION

APPROVED BY: EHS DEPT

PREPARED BY: E Bolton

INFORMATION CONTACT: msds@lesker.com

REVISION SUMMARY: This MSDS replaces the 3/11/2013 MSDS.
MANUFACTURER DISCLAIMER:

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.