SECTION 1: IDENTIFICATION

PRODUCT NAME: McKay Engine Sealer
PRODUCT NUMBER: 50912
CAS NUMBER: Mixture See Section 3.
PRODUCT FAMILY: Automotive Lube Oil Additive
HMIS: Health 1 Reactivity 0 Flammability 1

SECTION 2: HAZARD IDENTIFICATION

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

ASPIRATION HAZARD - Category 1

Danger
May be fatal if swallowed and enters airways.

Store locked up.
Dispose of contents and container in accordance with all local, regional, national and international regulations.
Defatting to the skin.
Avoid release to the environment.

<table>
<thead>
<tr>
<th>OSHA Health Hazard Classification</th>
<th>OSHA Physical Hazard Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irritant NO</td>
<td>Toxic NO</td>
</tr>
<tr>
<td>Sensitizer NO</td>
<td>Highly toxic NO</td>
</tr>
<tr>
<td>Corrosive NO</td>
<td>Carcinogenic NO</td>
</tr>
</tbody>
</table>

SECTION 3: COMPOSITION

<table>
<thead>
<tr>
<th>COMPONENT NAME(S)</th>
<th>CAS NO</th>
<th>CONCENTRATION (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>88-90</td>
<td>64742-52-5</td>
</tr>
<tr>
<td>Heterocyclic ether</td>
<td>10-12</td>
<td>Trade Secret</td>
</tr>
</tbody>
</table>
SECTION 4: FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If spontaneous vomiting is about to occur, place victims head between their knees to prevent aspiration. Call a physician or transport to an emergency facility immediately.

IF IN EYES: Rinse cautiously with water for several minutes. Lift upper and lower eyelids to ensure proper rinsing. Get medical attention if irritation persists.

IF ON SKIN: Wash skin with soap and water. Remove contaminated clothing and launder it before reuse. Should any irritation persist, get medical attention.

IF INHALED: Increase fresh air circulation or leave area. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm and quiet. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: Not Determined FLAMMABLE LIMITS: UEL Not Determined LEL Not Determined

EXTINGUISHING MEDIUM: AS APPROPRIATE FOR COMBUSTIBLES IN AREA.

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus when fighting fires containing or around this product. Shut off all sources of ignition, if possible. Keep exposed containers cool with water spray to prevent rupture. Evacuate all non-trained personnel. Wear full protective clothing, including helmet. Ventilate area. Contain spill and dike, if possible. For leaks or spills water spray can be used to disperse any flammable vapors that may become concentrated or form in poorly ventilated areas and to protect personnel attempting to stop the leak.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Firefighters should wear SCBA’s in a positive pressure mode with full face shield. Vapors are heavier than air and may travel long distances and accumulate in low areas or spread along ground from handling site. Eliminate all sources of ignition. Never use welding or cutting torch on or near this product because even just residue can ignite explosively.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up.

Ventilate area-especially low places where heavy vapors might collect. Extinguish all ignition sources. For small spills/leaks mop, wipe, or soak up on an inorganic material immediately. Remove to vent hood or outside. For large spills/leaks evacuate area, contain spill (dike area), and transfer contained liquid to a DOT approved container for disposal. Keep out of water supply. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personnel protective equipment.

SECTION 7: HANDLING AND STORAGE

Store in tightly sealed containers. Keep away from heat, sparks & open flame. Do not get in eyes, on skin or clothing. Do not breathe vapor, mist or gas. Do not store or transfer to an unmarked container. Do not throw empty containers in trash compactor. Do not store in direct sun. Store containers below 120°F. Read label before using.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Control airborne concentrations below the exposure limits see below. Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Lethal concentrations may exist in areas with poor ventilation.

PERSONAL PROTECTIVE EQUIPMENT: Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. Minimum requirements are: SAFETY GLASSES and GLOVES.

RESPIRATORY PROTECTION (SPECIFY TYPE): If workplace exposure limit(s) of product or any component is exceeded (see Section two), a NIOSH approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering or administrative controls should be implemented to reduce exposure.

HAND PROTECTION: For brief contact, no precautions should be needed. When prolonged or frequently repeated contact could occur, use protective gloves such as; polyvinyl alcohol or polyethylene.

EYE PROTECTION: Chemical splash goggles in compliance with OSHA regulations are advised; OSHA regulations also permit other type of safety glasses (consult your safety equipment supplier)

BODY PROTECTION: To prevent repeated or prolonged skin contact, use protective clothing impervious to this product. Selection of specific items such as gloves, boots, apron, or full body suit will depend on operation.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>ACGIH TLV (United States, 4/2014). TWA: 5 mg/m³ 8 hours. Form: inhalable fraction NIOSH REL (United States, 10/2013). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 2/2013). TWA: 5 mg/m³ 8 hours.</td>
</tr>
</tbody>
</table>

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid COLOR: Clear ODOR: Sweet petroleum oil
SPECIFIC GRAVITY: 0.80-0.90 (Water =1) pH: N/A VAPOR DENSITY (Air =1): N/A
BOILING POINT RANGE: N/D MELTING POINT /FREEZING POINT: N/D
VAPOR PRESSURE (mmHg or psig @70ºF): N/A VISCOSITY (cps @ 70ºF) N/D
SOLUBILITY IN WATER % BY WT.: Nil VOLATILE ORGANIC COMPOUNDS (VOCs) Content: Not regulated

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable, avoid open flames, welding arcs or other high temperature sources which induce thermal decomposition and direct sunlight.
INCOMPATIBILITY: Avoid contact with strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, and carbon monoxide.
HAZARDOUS POLYMERIZATION: Will not occur.
SECTION 11:  TOXICOLOGICAL INFORMATION

No toxicological studies have been conducted on this product.

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Aspiration hazard

<table>
<thead>
<tr>
<th>Name</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
</tbody>
</table>

SECTION 12:  ECOLOGICAL INFORMATION

No ecological studies have been conducted on this product.

ECOTOXICITY: If spilled this any water or soil contaminated may be hazardous to human, animal and aquatic life.

ENVIRONMENTAL FATE: The chemicals in this product are potentially toxic to freshwater and salt water ecosystems. They will normally float on water with their lighter components evaporating rapidly. In stagnant or slow-flowing waterways, a hydrocarbon layer can cover a large surface area. As a result this layer might limit or eliminate natural atmospheric oxygen transport into the water. Which with time could lead to a fish kill or an anaerobic environment.

Heterocyclic ether

<table>
<thead>
<tr>
<th>LC 50</th>
<th>Rainbow Trout</th>
<th>4 d</th>
<th>2.4 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC 50</td>
<td>Sheepshead minnow</td>
<td>4 d</td>
<td>3.3 mg/l</td>
</tr>
<tr>
<td>NOEC</td>
<td>Rainbow Trout</td>
<td>4 d</td>
<td>1 mg/l</td>
</tr>
<tr>
<td>EC 50</td>
<td>Water Flea</td>
<td>2 d</td>
<td>4.6 mg/l</td>
</tr>
<tr>
<td>NOEC</td>
<td>Water Flea</td>
<td>2 d</td>
<td>0.63 mg/l</td>
</tr>
<tr>
<td>EC 50</td>
<td>Green Algae</td>
<td>3 d</td>
<td>63 mg/l</td>
</tr>
<tr>
<td>NOEC</td>
<td>Green Algae</td>
<td>3 d</td>
<td>0.313 mg/l</td>
</tr>
<tr>
<td>EC 50</td>
<td>Sludge</td>
<td>0.1 d</td>
<td>10,000 mg/l</td>
</tr>
<tr>
<td>OECD TG 301 B</td>
<td>9.6 %</td>
<td>28 d</td>
<td>Not readily biodegradable</td>
</tr>
</tbody>
</table>

SECTION 13:  DISPOSAL CONSIDERATIONS

Hazard characteristics and regulatory waste stream classification can change with product use. It is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

When disposing of unused contents, the preferred options are to send to licensed reclaimers or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local laws and regulations. Do not dump into sewers, on the ground, or into any body of water.


SECTION 14:  TRANSPORT INFORMATION

DOT STATUS: This material is regulated by the U.S. Department of Transportation (DOT).

PROPER SHIPPING NAME: (to ship on the ocean):

PETROLEUM, OIL, GREASE, & RELATED PRODUCTS NON-HAZARDFUL, NOT REGULATED

HAZARD CLASS: N/A PACKING GROUPS: N/A

PLACARDS: None Required EMERGENCY RESPONSE GUIDE NO: N/A
SECTION 15: REGULATORY INFORMATION

311/312 HAZARD CATEGORIES:
Fire Hazard: NO  Pressure Hazard: NO  Reactivity Hazard: NO  Immediate Hazard: NO  Delayed Hazard: NO

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III:
CHEMICAL  CAS NUMBER  CONCENTRATION %
None listed

FEDERAL EPA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires the notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities (rqs) in 40 CFR 302.4.

CHEMICAL  CAS NUMBER  CONCENTRATION % UPPER BOUND  RQs IN #
None listed

CALIFORNIA PROPOSITION 65  None listed

MASSACHUSETTS RIGHT TO KNOW:  No

PENNSYLVANIA RIGHT TO KNOW:  No

NEW JERSEY RIGHT TO KNOW:  No

SECTION 16: OTHER INFORMATION

REVISION INFORMATION
VERSION NUMBER:1.0003
PRINT DATE:

ABREVIATIONS:
N/A: Not Applicable    N/D: Not Determined    NE: Not Established
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists  OSHA: Occupational Safety and Health Administration
NIOSH: National Institute of Occupational Safety and Health

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