International SDS Documents

*FOR INFORMATION REFERENCE ONLY. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.
Safety Data Sheet
Revision date: November 2017

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Name of the substance: Laboratory In-Service Engine Oil Sample
Synonyms: Used Motor Oil, Used Engine Oil
Product Numbers: N/A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory test sample

Uses advised against: Other uses are not recommended unless an assessment is completed, prior to commencement of that use, which demonstrates that the use will be controlled.

1.3 Details of the supplier of the safety data sheet

Clark Laboratories
1801 Route 51 South
Jefferson Hills, PA 15025
412-387-1001

1.4 Emergency Telephone #

Transportation Emergency Response
Chemtrec - 24 hour emergency response: (800) 424-9300
International Collect: +1 703 741 5970
SDS Assistance Email: sds@clarktesting.com

2. Hazards identification

2.1 Classification of the substance or mixture

Classification 1272/2008 [CLP]: Asp. Tox. 1; H304
Not classified as hazardous according to 29 CFR 1910.1200 (2012)

2.2 Label elements

Not Classified

2.3 Other hazards

IMMEDIATE HEALTH EFFECTS
**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Contact with the skin causes irritation. Symptoms may include pain, itching, discoloration, swelling, and blistering. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

**Ingestion:** May be irritating to mouth, throat, and stomach. Symptoms may include pain, nausea, vomiting, and diarrhea.

**Inhalation:** Mists of this material may cause respiratory irritation. Symptoms of respiratory irritation may include coughing and difficulty breathing. Breathing this material at concentrations above the recommended exposure limits may cause central nervous system effects. Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, loss of coordination, blurred vision, drowsiness, confusion, or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors or convulsions, loss of consciousness, coma or death.

3. **Composition/ Information on ingredients**

3.2 **Mixtures**

**Description**

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>CAS / EC Number</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic Petroleum Distillates</td>
<td>64742-65-0/ 265-169-7</td>
<td>85-95% weight</td>
</tr>
<tr>
<td>Detergent/Dispersant Engine Oil Additive Package</td>
<td>N/A</td>
<td>5-15% weight</td>
</tr>
</tbody>
</table>

Preparation of solvent refined mineral oils with low content of aromatic hydrocarbons and additives.

**Hazardous ingredients**
Distillates (petroleum), solvent-dewaxed heavy paraffinic; REACH registration No.: 01-2119471299-27; EC No.: 265-169-7; CAS No.: 64742-65-0; Concentration: \(\geq 5-<10\%\)

**Additional information**
Full text of R-, H- and EUH-phrases: see section 16.

4. **First-aid measures**

4.1 **Description of first aid measures**

**General information**
When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice.

**After inhalation**
Remove casualty to fresh air and keep warm and at rest. Where appropriate artificial ventilation. In case of respiratory tract irritation, consult a physician.

**In case of skin contact**
Change contaminated, saturated clothing. After contact with skin, wash with plenty of water and soap. In case of skin irritation, consult a physician.
After eye contact
Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After ingestion
Do not induce vomiting. Call a physician immediately. Rinse mouth thoroughly with water. Where appropriate artificial ventilation. Observe risk of aspiration if vomiting occurs.

Self-protection of the first aider
No direct artificial respiration to be given by first aider. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Protect yourself against exposure to chemicals or blood-borne diseases by wearing gloves and eye protection. After providing first aid wash your exposed skin with soap and water.

4.2 Most important symptoms and effects, both acute and delayed
No information available.

4.3 Indication of any immediate medical attention and special treatment needed
First Aid, decontamination, treatment of symptoms.

5. Firefighting measures

FIRE CLASSIFICATION:
NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0

FLAMMABLE PROPERTIES:
Flashpoint: >200 deg. F
OSHA/NFPA FLAMIBILITY CLASS: Not classified as flammable or combustible by OSHA (see sect. 14 for transport class)

5.1 Extinguishing media
Suitable extinguishing media

Unsuitable extinguishing media
Strong water jet.

5.2 Special hazards arising from the substance or mixture
Hazardous combustion products
In case of fire may be liberated: Carbon dioxide (CO2). Carbon monoxide. Nitrogen oxides (NOx). Smoke and other incomplete combustion products.

5.3 Advice for firefighters/Firefighting Instructions
Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for firefighters
Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information
Do not inhale explosion and combustion gases. Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.
6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protection equipment. Avoid contact with skin, eyes and clothes. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Ventilate affected area. Keep away from sources of ignition - No smoking.

6.2 Environmental precautions
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Make sure spills can be contained, e.g. in sump pallets or kerbed areas. In case of escape or entry of larger quantities into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

For containment/Spill Management
Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. All equipment used when handling the product must be grounded. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

For cleaning up
Clear spills immediately. Small amounts can be wiped up with absorbent material (e.g. cloth, fleece). Absorb larger spillage with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate, closed containers for disposal. Ventilate affected area. Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4 Reference to other sections
See Section 8 for information on appropriate personal protective equipment.
See Section 12 for environmental precautions.
See Section 13 for additional waste treatment information.
Reporting (USA only) Report spills to local authorities and/or the US Coast Guard’s National Response Center at (800) 424-8802 as appropriate or required.

7. Handling and storage

7.1 Precautions for safe handling/Precautionary Measures
Use only in well-ventilated areas. Put lids on containers immediately after use. Avoid contact with skin, eyes and clothes. Avoid breathing vapour/mist. Keep away from sources of ignition - No smoking. Use only antistatically equipped (spark-free) tools.

Protective measures
Fire prevent measures
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Take precautionary measures against static discharges.

Environmental precautions
Do not allow to enter into surface water or drains.

Advises on general occupational hygiene
When using do not eat, drink, smoke. Wash hands before breaks and after work.

7.2 Conditions for safe storage, including any incompatibilities

Packaging materials/ General Storage Information
Only use containers specifically approved for the substance/product.

Requirements for storage rooms and vessels

4 of 13
Keep container tightly closed in a cool, well-ventilated place. Protect containers against damage.

**Hints on storage assembly**
Keep away from: Oxidising agent.

**Storage class (VCI)**: 10

**Do not store together with:**
Food, drink and feedingstuffs

**Further information on storage conditions**

**Recommended storage temperature** : 10-25°C / 50-77 °F.


**Container Warnings**: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly

**7.3 Specific end uses**
None

**8. Exposure controls / Personal protection**

**8.1 Control parameters**
**DNEL/DMEL and PNEC values**
**DNEL/DMEL**
No DNEL / DMEL-values available.

**PNEC**
No DNEL-values available.

**8.2 Exposure controls**
**Appropriate engineering controls**
Use only in well-ventilated areas. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Technical measures and the application of suitable work processes have priority over personal protection equipment.

**Personal protective equipment**
Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Eye / face protection**
Eye glasses with side protection (DIN EN 166)

**Skin protection:**
Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Polyvinyl Alcohol (PVA) (Note: Avoid contact with water. PVA deteriorates in water.), Viton.

Tested protective gloves must be worn: (DIN EN 374). The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

**Suitable material :**
**Permanent contact:**
Thickness of the glove material: 0,70 mm
Breakthrough time > 480 min

**Occasional contact (splashes):**
Thickness of the glove material: 0.40 mm
Breakthrough time > 30 min

**Breakthrough time:**
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves together with the supplier of these gloves. Check leak tightness / impermeability prior to use.

**Body protection**
Body protection not ordinarily required beyond standard issue work clothes. If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.

**Other protection measures**
When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

**Respiratory protection**
Determine if airborne concentrations are below the recommended exposure limits. If not, wear an approved respirator that provides adequate protection from measured concentrations of this material, such as: Air-Purifying Respirator for Organic Vapors.

When used as a fuel, this material can produce carbon monoxide in the exhaust. Determine if airborne concentrations are below the occupational exposure limit for carbon monoxide. If not, wear an approved positive-pressure air-supplying respirator.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

**Occupational Exposure Limits:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit</th>
<th>TWA</th>
<th>STEL</th>
<th>Ceiling</th>
<th>Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic Petroleum Distillates</td>
<td>ACGIH_TLV</td>
<td>5 ppm (as mist)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aliphatic Petroleum Distillates</td>
<td>OSHA_PEL</td>
<td>5 ppm (as mist)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Suitable respiratory protection apparatus**
Combination filtering device (DIN EN 141).

**General health and safety measures/General Considerations**
Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**9. Physical and chemical properties**
9.1 Information on basic physical and chemical properties
Appearance
Physical state: liquid
Colour: brown or black, dark liquid
Odour
Petroleum odor
Odour threshold
No data available
Safety relevant basis data
pH value: no data available
Boiling point / range: (1013 hPa) > 200 °C
Flash point: > 140 °C DIN EN ISO 2592
Pour Point: < -20 °C
Flammability (Solid, Gas): not applicable
Lower explosion limit: 0.6 % b.v.
Upper explosion limit: 6.5 % b.v.
Vapour pressure: (20 °C) no data available
Vapour Density (Air = 1): no data available
Evaporation Rate: no data available
Density: (15 °C) 0.87 g/cm³ DIN EN ISO 12185
Solubility in water: (20 °C) insoluble
Partition Coefficient (noctanol/water): (log Pow) not applicable
Viscosity: (40 °C) ca. 22 mm²/s DIN EN ISO 3104
Ignition temperature: > 240 °C
Decomposition point / range: no data available
Explosive Properties: not explosive
Oxidizing Properties: not oxidising
9.2 Other information
None

10. Stability and reactivity

10.1 Reactivity
No information available.
10.2 Chemical stability
This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions
No information available.
10.4 Conditions to avoid
No information available.
10.5 Incompatible materials
May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
10.6 Hazardous decomposition products:
None known
10.7 Hazardous Polymerization: This will not occur

11. Toxicological information

11.1 Information on toxicological effects
For the product toxicological data are not available. The statements are derived from the properties of the single components. Data apply to the main component.
Acute effects
No data available to indicate product may be an acute toxic oral, dermal or inhalation hazard.

Acute oral toxicity
Parameter : LD-50 (Distillates (petroleum), solvent-dewaxed heavy paraffinic; CAS No. : 64742-65-0)
Exposure route : oral
Species : rat
Effective dose : > 5000 mg/kg

Acute dermal toxicity
Parameter : LD-50 (Distillates (petroleum), solvent-dewaxed heavy paraffinic; CAS No. : 64742-65-0)
Exposure route : dermal
Species : rabbit
Effective dose : > 5000 mg/kg

Acute inhalation toxicity
Parameter : LD-50 (Distillates (petroleum), solvent-dewaxed heavy paraffinic; CAS No. : 64742-65-0)
Exposure route : inhalation
Species : rat
Effective dose : > 5,53 mg/l
Exposure time : 4 h

Irritant and corrosive effects
Not an irritant.

Primary irritation to the skin
Parameter : irritation of the skin (Distillates (petroleum), solvent-dewaxed heavy paraffinic; CAS No. : 64742-65-0)
Species : Rabbit
Result : not irritating

Irritation to eyes
Parameter : irritation of the eyes (Distillates (petroleum), solvent-dewaxed heavy paraffinic; CAS No. : 64742-65-0)
Species : Rabbit
Result : not irritating

Sensitisation
not sensitising.

In case of skin contact
Parameter : skin sensitisation (Distillates (petroleum), solvent-dewaxed heavy paraffinic; CAS No. : 64742-65-0)
Parameter : guinea pig
Result : not sensitizing

Repeated dose toxicity (subacute, subchronic, chronic)
Subacute dermal toxicity
Has degreasing effect on the skin.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
Carcinogenicity
no known significant effects or critical hazards.

Germ cell mutagenicity/Genotoxicity
no known significant effects or critical hazards.

Reproductive toxicity
no known significant effects or critical hazards.
Specific target organ toxicity (single exposure)
STOT SE 1 and 2
Not expected to cause organ damage from a single exposure.

Specific target organ toxicity (repeated exposure)
STOT RE 1 and 2
Not expected to cause organ damage from prolonged or repeated exposure.
Aspiration hazard
Based on the available data the classification criteria for aspiration toxicity are not met. Based on physico-chemical properties of the material.
For viscosity data, see chapter 9.

11.3 Other adverse effects
High mist or vapour concentrations can irritate the respiratory tracts, skin and eyes.

12. Ecological information

12.1 Toxicity
For the product ecotoxicological data are not available. The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components.

Aquatic toxicity
With high probability acutely not harmful to aquatic organisms.

12.2 Persistence and degradability
Abiotic degradation
Physicochemical elimination
Poorly watersoluble product. Can be mechanically precipitated to a large extent in biological sewage plants.

Biodegradation
Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.

12.3 Bioaccumulative potential
Contains components with the potential to bioaccumulate.

12.4 Mobility in soil
Floats on water.
Adsorbs to soil and has low mobility.

12.5 Results of PBT and vPvB assessment
The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

12.6 Other adverse effects
Poorly soluble mixture. Damage can be caused through mechanical influence of the product (eg. sticking).

12.7 Further ecological information
Do not allow uncontrolled discharge of product into the environment.

13. Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal
Waste codes / waste designations according to EWC / AVV
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Waste code product
12 01 07*
However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

Waste name
Mineral-based machining oils free of halogens (except emulsions and solutions).

Waste treatment options
Appropriate disposal / Product
The generation of waste should be avoided or minimized wherever possible. Consult the appropriate local waste disposal expert about waste disposal. Dispose according to legislation.

**Appropriate disposal / Package**

Non-contaminated packages may be recycled. Packing which cannot be properly cleaned must be disposed of.

Dispose of waste according to applicable legislation.

**Other disposal recommendations**

Containers, even those that have been emptied, can contain product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, drill, grind, weld or perform a similar operations on or near containers.

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**USA Only**-Consult federal, state and local waste regulations to determine appropriate options.

14. Transport information

14.1 UN number
No dangerous good in sense of this transport regulation.

14.2 UN proper shipping name
No dangerous good in sense of this transport regulation.

14.3 Transport hazard class(es)
No dangerous good in sense of this transport regulation.

14.4 Packing group
No dangerous good in sense of this transport regulation.

14.5 Environmental hazards
No dangerous good in sense of this transport regulation.

14.6 Special precautions for user
None

**NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT**

14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable
14.4 Packing group: Not applicable
14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable

**ICAO**

**NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT**

14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable
14.4 Packing group: Not applicable
14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable

**IMO**

**NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT**

10 of 13
14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable
14.4 Packing group: Not applicable
14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Description:** PETROLEUM LUBRICATING OIL, NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

**IMO/IMDG Shipping Description:** PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

**ICAO/IATA Shipping Description:** PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO TI OR IATA DGR

15. Regulatory information
SARA 311/312 CATEGORIES:  
1. Immediate (Acute) Health Effects: NO  
2. Delayed (Chronic) Health Effects: NO  
3. Fire Hazard: NO  
4. Sudden Release of Pressure Hazard: NO  
5. Reactivity Hazard: NO

**REGULATORY LISTS SEARCHED:**
4_I1=IARC Group 1  
4_I2A=IARC Group 2A  
4_I2B=IARC Group 2B  
05=NTP Carcinogen  
06=OSHA Carcinogen  
09=TSCA 12(b)  
15=SARA Section 313  
16=CA Proposition 65  
17=MA RTK  
18=NJ RTK  
19=DOT Marine Pollutant  
20=PA RTK

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations
Water hazard class (WGK)  
Class : 1 (slightly water pollutant) according VwVwS

15.2 Chemical safety assessment
No information available.

16. Other information
HMIS RATINGS: Health: 1* Flammability: 1 Reactivity: 0
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, * - Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value
TWA - Time Weighted Average
STEL - Short-term Exposure Limit
PEL - Permissible Exposure Limit
CAS - Chemical Abstract Service Number
NDA - No Data Available
NA - Not Applicable
<= - Less Than or Equal To
>= - Greater Than or Equal To

References:
EU Regulation 1907/2006

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. Adequate training and instruction should be given by you to your employees and affected personnel. Appropriate warnings and safe handling procedures should be provided by you to handlers and users. Additionally, the user should review this information, satisfy itself as to its suitability and completeness, and pass on the information to its employees or customers in accordance with the applicable federal, state, provincial or local hazard communication requirements. This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the fitness for use of the material, or the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, vendor neither assumes nor retains any responsibility for any damage or injury resulting from abnormal use, from any failure to adhere to appropriate practices, or from any hazards inherent in the nature of the material. Moreover, unless an employee or a customer accesses or receives a SDS directly from the company, there is no assurance that a document obtained from alternate sources is the most currently available SDS. The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.
Completed by Clark PTP Staff

No Annex
Domestic SDS Documents

*FOR INFORMATION REFERENCE ONLY*. A product specific SDS is included with each shipment. Use the SDS sent with each sample for information related to the product supplied per program cycle.
Safety Data Sheet
Revision date: November 2017

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Name of the substance: Laboratory In-Service Engine Oil Sample

Synonyms: Used Motor Oil, Used Engine Oil

Product Numbers: N/A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory test sample

Uses advised against: Other uses are not recommended unless an assessment is completed, prior to commencement of that use, which demonstrates that the use will be controlled.

1.3 Details of the supplier of the safety data sheet

Clark Laboratories
1801 Route 51 South
Jefferson Hills, PA 15025
412-387-1001

1.4 Emergency Telephone#

Transportation Emergency Response
Chemtrec 24 hour emergency response:
(800) 424-9300

International Collect: +1 703 741 5970

SDS Assistance Email: sds@clarktesting.com

2. Hazards identification

2.1 Classification of the substance or mixture

Classification 1272/2008 [CLP]: Asp. Tox. 1; H304

Not classified as hazardous according to 29 CFR 1910.1200 (2012)

2.2 Label elements

Not Classified

2.3 Other hazards

IMMEDIATE HEALTH EFFECTS
Eye: Not expected to cause prolonged or significant eye irritation.

Skin: Contact with the skin causes irritation. Symptoms may include pain, itching, discoloration, swelling, and blistering. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

Ingestion: May be irritating to mouth, throat, and stomach. Symptoms may include pain, nausea, vomiting, and diarrhea.

Inhalation: Mists of this material may cause respiratory irritation. Symptoms of respiratory irritation may include coughing and difficulty breathing. Breathing this material at concentrations above the recommended exposure limits may cause central nervous system effects. Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, loss of coordination, blurred vision, drowsiness, confusion, or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors or convulsions, loss of consciousness, coma or death.

3. Composition/ Information on ingredients

3.2 Mixtures
Description

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>CAS / EC Number</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic Petroleum Distillates</td>
<td>64742-65-0/ 265-169-7</td>
<td>85-95% weight</td>
</tr>
<tr>
<td>Detergent/Dispersant Engine Oil Additive Package</td>
<td>N/A</td>
<td>5-15% weight</td>
</tr>
</tbody>
</table>

Preparation of solvent refined mineral oils with low content of aromatic hydrocarbons and additives.

Hazardous ingredients
Distillates (petroleum), solvent-dewaxed heavy paraffinic ; REACH registration No. : 01-2119471299-27 ;
EC No : 265-169-7;
CAS No. : 64742-65-0
Concentration : >=5-<10%

Additional information
Full text of R-, H- and EUH-phrases: see section 16.

4. First-aid measures

4.1 Description of first aid measures
General information
When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice.

After inhalation
Remove casualty to fresh air and keep warm and at rest. Where appropriate artificial ventilation. In case of respiratory tract irritation, consult a physician.

In case of skin contact
Change contaminated, saturated clothing. After contact with skin, wash with plenty of water and soap. In case of skin irritation, consult a physician.
After eye contact
Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do.
Continue rinsing. In case of eye irritation consult an ophthalmologist.

After ingestion
Do not induce vomiting. Call a physician immediately. Rinse mouth thoroughly with water. Where appropriate artificial ventilation. Observe risk of aspiration if vomiting occurs.

Self-protection of the first aider
No direct artificial respiration to be given by first aider. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Protect yourself against exposure to chemicals or blood-borne diseases by wearing gloves and eye protection. After providing first aid wash your exposed skin with soap and water.

4.2 Most important symptoms and effects, both acute and delayed
No information available.

4.3 Indication of any immediate medical attention and special treatment needed
First Aid, decontamination, treatment of symptoms.

5. Firefighting measures

FIRE CLASSIFICATION:
NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0

FLAMMABLE PROPERTIES:
Flashpoint: >200 deg. F
OSHA/NFPA FLAMIBILITY CLASS: Not classified as flammable or combustible by OSHA (see sect. 14 for transport class)

5.1 Extinguishing media
Suitable extinguishing media

Unsuitable extinguishing media
Strong water jet.

5.2 Special hazards arising from the substance or mixture
Hazardous combustion products
In case of fire may be liberated: Carbon dioxide (CO2). Carbon monoxide. Nitrogen oxides (NOx). Smoke and other incomplete combustion products.

5.3 Advice for firefighters/Firefighting Instructions
Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for firefighters
Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information
Do not inhale explosion and combustion gases. Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.
6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protection equipment. Avoid contact with skin, eyes and clothes. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Ventilate affected area. Keep away from sources of ignition - No smoking.

6.2 Environmental precautions
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Make sure spills can be contained, e.g. in sump pallets or kerbed areas. In case of escape or entry of larger quantities into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up
For containment/Spill Management
Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. All equipment used when handling the product must be grounded. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

For cleaning up
Clear spills immediately. Small amounts can be wiped up with absorbent material (eg. cloth, fleece). Absorb larger spillage with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate, closed containers for disposal. Ventilate affected area. Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4 Reference to other sections
See Section 8 for information on appropriate personal protective equipment.
See Section 12 for environmental precautions.
See Section 13 for additional waste treatment information.
Reporting (USA only) Report spills to local authorities and/or the US Coast Guard’s National Response Center at (800) 424-8802 as appropriate or required.

7. Handling and storage

7.1 Precautions for safe handling/Precautionary Measures
Use only in well-ventilated areas. Put lids on containers immediately after use. Avoid contact with skin, eyes and clothes. Avoid breathing vapour/mist. Keep away from sources of ignition - No smoking. Use only antistatically equipped (spark-free) tools.

Protective measures
Fire prevent measures
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Take precautionary measures against static discharges.

Environmental precautions
Do not allow to enter into surface water or drains.

Advices on general occupational hygiene
When using do not eat, drink, smoke. Wash hands before breaks and after work.

7.2 Conditions for safe storage, including any incompatibilities
Packaging materials/ General Storage Information
Only use containers specifically approved for the substance/product.
Requirements for storage rooms and vessels
Keep container tightly closed in a cool, well-ventilated place. Protect containers against damage.

**Hints on storage assembly**
Keep away from: Oxidising agent.

**Storage class (VCI)**: 10

**Do not store together with:**
Food, drink and feedingstuffs

**Further information on storage conditions**

**Recommended storage temperature**: 10-25°C / 50-77 °F.

**Protect against**: Frost, Heat, UV-radiation/sunlight, Water Humidity.

**Container Warnings**: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly

**7.3 Specific end uses**
None

**8. Exposure controls / Personal protection**

**8.1 Control parameters**

**DNEL/DMEL and PNEC values**

**DNEL/DMEL**
No DNEL / DMEL-values available.

**PNEC**
No DNEL-values available.

**8.2 Exposure controls**

**Appropriate engineering controls**
Use only in well-ventilated areas. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Technical measures and the application of suitable work processes have priority over personal protection equipment.

**Personal protective equipment**
Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Eye / face protection**
Eye glasses with side protection (DIN EN 166)

**Skin protection:**
Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Polyvinyl Alcohol (PVA) (Note: Avoid contact with water. PVA deteriorates in water.), Viton.

Tested protective gloves must be worn: (DIN EN 374). The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

**Suitable material :**

**Permanent contact:**
Thickness of the glove material: 0,70 mm
Breakthrough time > 480 min

Occasional contact (splashes):
Thickness of the glove material: 0.40 mm
Breakthrough time > 30 min

Breakthrough time:
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves together with the supplier of these gloves. Check leak tightness / impermeability prior to use.

Body protection
Body protection not ordinarily required beyond standard issue work clothes. If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.

Other protection measures
When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

Respiratory protection
Determine if airborne concentrations are below the recommended exposure limits. If not, wear an approved respirator that provides adequate protection from measured concentrations of this material, such as: Air-Purifying Respirator for Organic Vapors.

When used as a fuel, this material can produce carbon monoxide in the exhaust. Determine if airborne concentrations are below the occupational exposure limit for carbon monoxide. If not, wear an approved positive-pressure air-supplying respirator.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit</th>
<th>TWA</th>
<th>STEL</th>
<th>Ceiling</th>
<th>Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic Petroleum Distillates</td>
<td>ACGIH_TLV</td>
<td>5 ppm (as mist)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aliphatic Petroleum Distillates</td>
<td>OSHA_PEL</td>
<td>5 ppm (as mist)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Suitable respiratory protection apparatus
Combination filtering device (DIN EN 141).

General health and safety measures/General Considerations
Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the workplace when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

9. Physical and chemical properties
9.1 Information on basic physical and chemical properties

Appearance
Physical state: liquid
Colour: brown or black, dark liquid
Odour
Petroleum odor
Odour threshold
No data available
Safety relevant basis data
pH value: no data available
Boiling point / range: (1013 hPa) > 200 °C
Flash point: > 140 °C DIN EN ISO 2592
Pour Point: < -20 °C
Flammability (Solid, Gas): not applicable
Lower explosion limit: 0,6 % b.v.
Upper explosion limit: 6,5 % b.v.
Vapour pressure: (20 °C) no data available
Vapour Density (Air = 1): no data available
Evaporation Rate: no data available
Density: (15 °C) 0,87 g/cm3 DIN EN ISO 12185
Solubility in water: (20 °C) insoluble
Partition Coefficient (noctanol/water): (log Pow) not applicable
Viscosity: (40 °C) ca. 22 mm²/s DIN EN ISO 3104
Ignition temperature: > 240 °C
Decomposition point / range: no data available
Explosive Properties: not explosive
Oxidizing Properties: not oxidising

9.2 Other information
None

10. Stability and reactivity

10.1 Reactivity
No information available.

10.2 Chemical stability
This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions
No information available.

10.4 Conditions to avoid
No information available.

10.5 Incompatible materials
May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

10.6 Hazardous decomposition products:
None known

10.7 Hazardous Polymerization: This will not occur

11. Toxicological information

11.1 Information on toxicological effects
For the product toxicological data are not available. The statements are derived from the properties of the single components. Data apply to the main component.
Acute effects
No data available to indicate product may be an acute toxic oral, dermal or inhalation hazard.

Acute oral toxicity
Parameter : LD-50 (Distillates (petroleum), solvent-dewaxed heavy paraffinic; CAS No. : 64742-65-0)
Exposure route : oral
Species : rat
Effective dose : > 5000 mg/kg

Acute dermal toxicity
Parameter : LD-50 (Distillates (petroleum), solvent-dewaxed heavy paraffinic; CAS No. : 64742-65-0)
Exposure route : dermal
Species : rabbit
Effective dose : > 5000 mg/kg

Acute inhalation toxicity
Parameter : LD-50 (Distillates (petroleum), solvent-dewaxed heavy paraffinic; CAS No. : 64742-65-0)
Exposure route : inhalative
Species : rat
Effective dose : > 5.53 mg/l
Exposure time : 4 h

Irritant and corrosive effects
Not an irritant.

Primary irritation to the skin
Parameter : irritation of the skin (Distillates (petroleum), solvent-dewaxed heavy paraffinic; CAS No. : 64742-65-0)
Species : Rabbit
Result : not irritating

Irritation to eyes
Parameter : irritation of the eyes (Distillates (petroleum), solvent-dewaxed heavy paraffinic; CAS No. : 64742-65-0)
Species : Rabbit
Result : not irritating

Sensitisation
not sensitising.

In case of skin contact
Parameter : skin sensitisation (Distillates (petroleum), solvent-dewaxed heavy paraffinic; CAS No. : 64742-65-0)
Parameter : guinea pig
Result : not sensitizing

Repeated dose toxicity (subacute, subchronic, chronic)
Subacute dermal toxicity
Has degreasing effect on the skin.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
Carcinogenicity
no known significant effects or critical hazards.

Germ cell mutagenicity/Genotoxicity
no known significant effects or critical hazards.

Reproductive toxicity
no known significant effects or critical hazards.

Specific target organ toxicity (single exposure)
STOT SE 1 and 2
Not expected to cause organ damage from a single exposure.

Specific target organ toxicity (repeated exposure)
STOT RE 1 and 2
Not expected to cause organ damage from prolonged or repeated exposure.
Aspiration hazard
Based on the available data the classification criteria for aspiration toxicity are not met. Based on physicochemical properties of the material. For viscosity data, see chapter 9.

11.3 Other adverse effects
High mist or vapour concentrations can irritate the respiratory tracts, skin and eyes.

12. Ecological information

12.1 Toxicity
For the product ecotoxicological data are not available. The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components.

Aquatic toxicity
With high probability acutely not harmful to aquatic organisms.

12.2 Persistence and degradability
Abiotic degradation
Physicochemical elimination
Poorly watersoluble product. Can be mechanically precipitated to a large extent in biological sewage plants.

Biodegradation
Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.

12.3 Bioaccumulative potential
Contains components with the potential to bioaccumulate.

12.4 Mobility in soil
Floats on water.
Adsorbs to soil and has low mobility.

12.5 Results of PBT and vPvB assessment
The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

12.6 Other adverse effects
Poorly soluble mixture. Damage can be caused through mechanical influence of the product (eg. sticking).

12.7 Further ecological information
Do not allow uncontrolled discharge of product into the environment.

13. Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal
Waste codes / waste designations according to EWC / AVV
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Waste code product
12 01 07*
However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

Waste name
Mineral-based machining oils free of halogens (except emulsions and solutions).

Waste treatment options
Appropriate disposal / Product
10 of 13

The generation of waste should be avoided or minimized wherever possible. Consult the appropriate local waste disposal expert about waste disposal. Dispose according to legislation.

**Appropriate disposal / Package**
Non-contaminated packages may be recycled. Packing which cannot be properly cleaned must be disposed of.
Dispose of waste according to applicable legislation.

**Other disposal recommendations**
Containers, even those that have been emptied, can contain product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, drill, grind, weld or perform a similar operations on or near containers.
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**USA Only**-Consult federal, state and local waste regulations to determine appropriate options.

14. Transport information

14.1 UN number
No dangerous good in sense of this transport regulation.

14.2 UN proper shipping name
No dangerous good in sense of this transport regulation.

14.3 Transport hazard class(es)
No dangerous good in sense of this transport regulation.

14.4 Packing group
No dangerous good in sense of this transport regulation.

14.5 Environmental hazards
No dangerous good in sense of this transport regulation.

14.6 Special precautions for user
None

**NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT**

14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable
14.4 Packing group: Not applicable
14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable

**ICAO**

**NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT**

14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable
14.4 Packing group: Not applicable
14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable

**IMO**

**NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT**
14.1 UN number: Not applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable
14.4 Packing group: Not applicable
14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Not applicable
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT Shipping Description: PETROLEUM LUBRICATING OIL, NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

IMO/IMDG Shipping Description: PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

ICAO/IATA Shipping Description: PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO TI OR IATA DGR

15. Regulatory information
SARA 311/312 CATEGORIES:
1. Immediate (Acute) Health Effects: NO
2. Delayed (Chronic) Health Effects: NO
3. Fire Hazard: NO
4. Sudden Release of Pressure Hazard: NO
5. Reactivity Hazard: NO

REGULATORY LISTS SEARCHED:
4_I1=IARC Group 1 15=SARA Section 313
4_I2A=IARC Group 2A 16=CA Proposition 65
4_I2B=IARC Group 2B 17=MA RTK
05=NTP Carcinogen 18=NJ RTK
06=OSHA Carcinogen 19=DOT Marine Pollutant
09=TSCA 12(b) 20=PA RTK

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulations
Water hazard class (WGK)
Class : 1 (slightly water pollutant) according VwVwS

15.2 Chemical safety assessment
No information available.

16. Other information
HMIS RATINGS: Health: 1* Flammability: 1 Reactivity: 0
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value  
TWA - Time Weighted Average

STEL - Short-term Exposure Limit  
PEL - Permissible Exposure Limit

CAS - Chemical Abstract Service Number

NDA - No Data Available  
NA - Not Applicable

<= - Less Than or Equal To  
>= - Greater Than or Equal To

References:
EU Regulation 1907/2006

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. Adequate training and instruction should be given by you to your employees and affected personnel. Appropriate warnings and safe handling procedures should be provided by you to handlers and users. Additionally, the user should review this information, satisfy itself as to its suitability and completeness, and pass on the information to its employees or customers in accordance with the applicable federal, state, provincial or local hazard communication requirements. This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the fitness for use of the material, or the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, vendor neither assumes nor retains any responsibility for any damage or injury resulting from abnormal use, from any failure to adhere to appropriate practices, or from any hazards inherent in the nature of the material. Moreover, unless an employee or a customer accesses or receives a SDS directly from the company, there is no assurance that a document obtained from alternate sources is the most currently available SDS. The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.