SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
Name of the substance: Automotive Engine Oil
Other Means of Identification: 5W-30
Issue Date: 03/25/2016
Revised: 01/05/2011

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

SECTION 2 HAZARDS IDENTIFICATION

Emergency Overview

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Amber, Transparent</td>
</tr>
<tr>
<td>Odor</td>
<td>Petroleum</td>
</tr>
</tbody>
</table>

2.1 Classification of the substance or mixture
DSD/DPD CLASSIFICATION: Not classified as dangerous according to EU regulatory guidelines.
Not classified as hazardous according to 29 CFR 1910.1200 (2012)

Precautionary Statements:
If medical advice is needed: Have product container or label at hand. Keep out of reach of children. Read label before use.

2.2 Label elements
Under the criteria of Directive 1999/45/EC (dangerous preparations): Not classified

2.3 Other hazards: None known

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Mixtures

<table>
<thead>
<tr>
<th>CAS</th>
<th>EC</th>
<th>Component Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>64741-88-4</td>
<td>265-090-8</td>
<td>Petroleum Distillates, solvent-refined heavy</td>
<td>0-100</td>
</tr>
</tbody>
</table>

Page 1 of 9
<table>
<thead>
<tr>
<th>Code</th>
<th>UN No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-01-4</td>
<td>265-101-6</td>
<td>Residual oils, petroleum, solvent-refined</td>
</tr>
<tr>
<td>64742-57-0</td>
<td>265-160-8</td>
<td>Residual oils (petroleum), hydrotreated</td>
</tr>
<tr>
<td>72623-83-7</td>
<td>276-735-8</td>
<td>Lubricating oils, petroleum, C&gt;25, hydrotreated bright stock-based</td>
</tr>
<tr>
<td>64742-62-7</td>
<td>265-166-0</td>
<td>Residual oils (petroleum), hydrotreated spent</td>
</tr>
<tr>
<td>64742-58-1</td>
<td>265-161-3</td>
<td>Lubricating oils, petroleum, hydrotreated spent</td>
</tr>
<tr>
<td>72623-87-1</td>
<td>276-738-4</td>
<td>Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based</td>
</tr>
<tr>
<td>178603-64-0</td>
<td>Not Available</td>
<td>Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C15-30, branched and cyclic, high viscosity index.</td>
</tr>
<tr>
<td>178603-65-1</td>
<td>Not Available</td>
<td>Gas oils, petroleum, vacuum, hydrocracked, hydroisomerized, hydrogenated, C15-30, branched and cyclic, high viscosity index.</td>
</tr>
<tr>
<td>Not Available</td>
<td>Not Available</td>
<td>Mineral Oil</td>
</tr>
<tr>
<td>64742-52-5</td>
<td>265-155-0</td>
<td>Petroleum Distillates, hydrotreated heavy naphthenic</td>
</tr>
<tr>
<td>68649-42-3</td>
<td>272-028-3</td>
<td>Phosphorodithioic acid, O, O-di-Cl-14-alkyl esters, zinc salts</td>
</tr>
</tbody>
</table>

**SECTION 4 FIRST AID MEASURES**

4.1 Description of first aid measures

**Eye:** Flush eyes for 30 minutes with water. Get medical attention if irritation persists.

**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** If swallowed, get medical attention. Do not induce vomiting. Danger of Aperation

**Inhalation:** If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention.
attention if breathing issues occur.

4.2 Most important symptoms and effects, both acute and delayed
IMMEDIATE SYMPTOMS AND HEALTH EFFECTS

   No information available.

DELAYED OR OTHER SYMPTOMS AND HEALTH EFFECTS: Not classified.

4.3 Indication of any immediate medical attention and special treatment needed
Notes to Physician: Treat symptomatically

SECTION 5 FIRE FIGHTING MEASURES
5.1 Extinguishing media
Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

5.2 Special hazards arising from the substance or mixture
Combustion Products: Toxic pyrolysis products, smoke, carbon oxides, sulfur oxides, ignitable vapors and gases possible. Hot product may produce flammable vapors.

5.3 Advice for firefighters
Protection of firefighters

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

5.3.2 FLAMMABILITY PROPERTIES
   Flash Point [Method]: 195°C (Min. 383°F)
   Flammable Limits (Approximate volume % in air): LEL: 0.9 UEL: 7.0
   Autoignition Temperature: N/D

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Protective Measures
Provide adequate ventilation. Keep away from sources of ignition and do not smoke. Avoid eye and skin contact as well as inhalation. Remove contaminated, saturated clothing. Attention, risk of slipping

6.2 Environmental precautions
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. Report released to the appropriate Federal, State and Local Agencies.

6.3 Methods and material for containment and cleaning up
Spill Management & reporting
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. Where feasible and appropriate, remove contaminated soil and dispose of in a manner consistent with applicable requirements. Place other contaminated materials in disposable containers and dispose of in a manner consistent with applicable requirements. Report spills to local authorities as/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

6.4 Reference to other sections
See sections 5, 7, 8, and 13.

SECTION 7 HANDLING AND STORAGE
7.1 Precautions for safe handling
Precautionary Measures
  Do not get in eyes, on skin, or on clothing. Do not breathe mist. Do not taste or swallow. Wash thoroughly after
7.2 Conditions for safe storage, including any incompatibilities

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage, drainage systems, and bodies of water.

**General Storage Information:** DO NOT USE OR STORE near heat, sparks or open flames. Keep container closed when not in use. Store in a cool dry environment.

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits/standards for materials that can be formed when handling this product: When mists/aerosols can occur the following are recommended: 5 mg/m³ - ACGIH TLV (inhalable fraction), 5 mg/m³ - OSHA PEL.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

#### 8.1 Control parameters Occupational

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### 8.2 Exposure controls ENGINEERING CONTROLS: Showers, eyewash stations, ventilation systems.

**PERSONAL PROTECTIVE EQUIPMENT**

**Eye/Face Protection:** Wear safety goggles with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Wear protective gloves comprised of either Nitrile Rubber, Viton, or Silver Shield.

**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.

**ENVIRONMENTAL EXPOSURE CONTROLS:**

See relevant Community environmental protection legislation or the Annex, as applicable.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Attention:** the data below are typical values and do not constitute a specification.

#### 9.1 Information on basic physical and chemical properties

**Appearance:** Liquid

**Color:** Amber

**Odor:** Characteristic Petroleum Odor

**Odor Threshold:** No data available

**pH:** Not Applicable

**Flashpoint:** Minimum 383°F / >195°C

**Evaporation Rate:** No data available
Autoignition: No data available.
Pour Point: No Data
 Bulk Density: 7.3 lbs/gal (US Approximate)
Viscosity: >20.5mm²/s @ 104°C
Auto-ignition temperature: No data available

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity: Not chemically reactive
10.2 Chemical Stability: Stable under normal conditions and anticipated conditions of use
10.3 Possibility of hazardous reactions (polymerization): Hazardous reactions not anticipated
10.4 Conditions to Avoid: This material is considered stable when stored and handled as prescribed. Formation of ignitable vapors and gases possible at temperature exceeding the flashpoint.
10.5 Incompatible materials to avoid: Avoid contact with strong oxidizing agents.
10.6 Hazardous decomposition products: Not anticipated under normal conditions of use.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Serious Eye Damage/Irritation: Not expected to be irritating.
Skin Corrosion/Irritation: Not expected to be irritating. Repeated exposure may cause skin dryness or cracking.
Skin Sensitization: No information available on the mixture, however none of the components have been classified for skin sensitization (or are below the concentration threshold for classification).
Acute Dermal Toxicity: The acute dermal toxicity hazard is based on evaluation of data for product components.
Acute Oral Toxicity: The acute oral toxicity hazard is based on evaluation of data for product components.
Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for product components.

Germ Cell Mutagenicity: The hazard evaluation is based on data for components or a similar material.
Carcinogenicity: The hazard evaluation is based on data for components or a similar material.
Reproductive Toxicity: The hazard evaluation is based on data for components or a similar material.

Specific Target Organ Toxicity - Single Exposure: The hazard evaluation is based on data for components or a similar material.
Specific Target Organ Toxicity - Repeated Exposure: The hazard evaluation is based on data for components or a similar material.
Acute Toxicity Estimate: Not determined

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity: There is no data available on the preparation/mixture itself. Classification: none
12.2 Bioaccumulative potential: There is no data available on the preparation/mixture itself.
12.3 Mobility in soil
No data available.
12.4 Other adverse effects: Effects in sewage plants: Mechanical separation in a suitable sewage plant is possible.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Use the material for its intended purpose or recycle. Place contaminated materials in appropriate containers and dispose of or recycle in a manner consistent with Federal, State and Local regulations.
ADR/RID

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

SECTION 15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture REGULATORY LISTS SEARCHED:

No components of this material were found on the regulatory lists above.

**CHEMICAL INVENTORIES:**
All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), EINECS (European Union), KECI (Korea), PICCS (Philippines), TSCA (United States).

One or more components does not comply with the following chemical inventory requirements: ENCS (Japan).

**15.2 Chemical safety assessment**
No chemical safety assessment.

**EPCRA 311/312 CATEGORIES:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Immediate (Acute) Health Effects</td>
<td>NO</td>
</tr>
<tr>
<td>2.</td>
<td>Delayed (Chronic) Health Effects</td>
<td>NO</td>
</tr>
<tr>
<td>3.</td>
<td>Fire Hazard</td>
<td>NO</td>
</tr>
<tr>
<td>4.</td>
<td>Sudden Release of Pressure Hazard</td>
<td>NO</td>
</tr>
<tr>
<td>5.</td>
<td>Reactivity Hazard</td>
<td>NO</td>
</tr>
</tbody>
</table>

**REGULATORY LISTS SEARCHED:**

- 1-1 IARC Group 1
- 1-2 A IARC Group 2A
- 01-2B IARC Group 2B
- 02 NTP Carcinogen
- 03 EPCRA 313
- 04 CA Proposition 65
- 05 MA RTK
- 06 NJ RTK
- 07 PA RTK
- 15 SARA Section 313
- 16 CA Proposition 65
- 17 MA RTK
- 18 NJ RTK
- 06 OSHA Carcinogen
- 19 DOT Marine Pollutant
- 09 TSCA 12(b)

No components of this material were found on the regulatory lists above.

**CHEMICAL INVENTORIES:**
All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), KECI (Korea), PICCS (Philippines), TSCA (United States).

One or more components is listed on ELINCS (European Union). Secondary notification by the importer may be required. All other components are listed or exempted from listing on EINECS.

One or more components does not comply with the following chemical inventory requirements: ENCS (Japan).

**NEW JERSEY RTK CLASSIFICATION:**
Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Motor oil)

The following components of this material are found on the regulatory lists indicated.

**Nothing Found during Search**

**CHEMICAL INVENTORIES:**
UNITED STATES: All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory.

CANADA: All the components of this material are on the Canadian DSL or have been notified under the New Substance Notification Regulations, but have not yet been published in the Canada Gazette.
WHMIS CLASSIFICATION:
Class B, Division 3: Combustible Liquids
Class D, Division 2, Subdivision A: Very Toxic Material - Carcinogenicity
Class D, Division 2, Subdivision B: Toxic Material - Skin or Eye Irritation

SECTION 16 OTHER INFORMATION

REVISION STATEMENT: This revision updates the following sections of this Safety Data Sheet: 1
Revision Date: JANUARY 8, 2017

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

LABEL RECOMMENDATION:
Label Category: ENGINE OIL 1 - ENG1

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200), the ANSI MSDS Standard (Z400.1) and in accordance with both EU 67/548/EEC(DSD) and CLP regulation.

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-term Exposure Limit</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System</td>
</tr>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
</tr>
<tr>
<td>API</td>
<td>American Petroleum Institute</td>
</tr>
<tr>
<td>HMIS</td>
<td>Hazardous Materials Information System</td>
</tr>
<tr>
<td>DOT</td>
<td>Department of Transportation (USA)</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>NCEL</td>
<td>New Chemical Exposure Limit</td>
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<tr>
<td>SCBA</td>
<td>Self-Contained Breathing Apparatus</td>
</tr>
<tr>
<td>TWA</td>
<td>Time Weighted Average</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service Number</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>SDS</td>
<td>Safety Data Sheet</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Association (USA)</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program (USA)</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
</tbody>
</table>

Full text of R-phrases:
None

Full text of CLP H-statements:
None

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

<table>
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<tr>
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</tr>
<tr>
<td>CVX</td>
<td>Chevron</td>
</tr>
<tr>
<td>NQ</td>
<td>Not Quantifiable</td>
</tr>
<tr>
<td>TWA</td>
<td>Time Weighted Average</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service Number</td>
</tr>
</tbody>
</table>

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.

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Completed by Clark PTP Staff

No Annex