Safety Data Sheet

Revision date: 07/14/2021 SDS# 080

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

| COMPONENTS | CAS /EC Number | Concentration (%) |
|--|--------------------------|-------------------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | 64742-65-0/265- 169-7 | 5.2547 |
| Hydrotreated Light Paraffinic Distillate | 64742-55-8/265- 158-7 | 1.1945 |
| Zinc Bis(O-6-Methylhelptyl)Bis(O-Sec-butyl) Bis (Dithiophospate) | 93819-94-4/298- 577-9 | 1.036 |

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. 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: >199 °C

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

Foam. Extinguishing powder. Carbon dioxide (CO2). Water spray. Water mist.

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 curbed 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: Oxidizing agent.

Storage class (VCI): 10 Do not store together with: Food, drink and feeding stuffs

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:

Material: NBR (Nitrile rubber). CR (neoprene rubber). PVA (Polyvinyl alcohol).

Thickness of the glove material: 0.70 mm

Breakthrough time > 480 min

Occasional contact (splashes):

Material: NBR (Nitrile rubber). CR (neoprene rubber). PVA (Polyvinyl alcohol).

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:

Components with workplace control parameters

| Component | Value Type (form of exposure) | Control parameters/Permissible concentration | Basis |
|--|-------------------------------------|--|-------------|
| Hydrotreated Light Paraffinic Distillate | TWA | 5 mg/m3 Mist | OSHA Z-1 |

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: Amber

Odour

Hydrocarbon-like **Odour threshold** No data available

Safety relevant basis data pH value: no data available

Initial Boiling point: >218.3°C (424.9 °F)

Flash point: (Cleveland Open Cup) >199°C (390.2 °F) Method: Cleveland Open Cup

Flammability (Solid, Gas): not applicable

Vapour pressure : 0.0133333 hPa (21.11 °C)

Lower explosion limit: 1 % (V) Calculated Explosive Limit **Upper explosion limit**: 6 % (V) Calculated Explosive Limit

Vapour Density (Air = 1): no data available Evaporation Rate: no data available Density: 0.880 g/cm3 (15.56 °C) Solubility in water: insoluble Partition Coefficient (noctanol/water): (log Pow) not applicable

Viscosity, kinematic: 115 mm2/s (40 °C)

Decomposition point / range: no data available

9.2 Other information

None

10. STABILITY AND REACTIVITY

10.1 Reactivity

May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc..

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

Not applicable

10.6 Hazardous decomposition products:

Hydrogen Sulfide (elevated temperatures)

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: inhale

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 water soluble 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 operation 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 applicable14.6 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 applicable14.6 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 applicable14.6 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:

Immediate (Acute) Health Effects: NO
 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 polluant) according VwVwS

15.2 Chemical safety assessment

No information available.

16. OTHER INFORMATION

HMIS RATINGS: Health: 0 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:

29 CFR 1910.1200 (2012 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