SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
  - **Product Description**: Base Oil & Additives
  - **Intended Use**: Grease

- **1.2 Identified Uses**: Laboratory Test Sample

- **1.3 Details of the supplier of the Safety Data Sheet**
  - **Manufacturer/Supplier**: Clark Laboratories
    1801 Route 51 South
    Jefferson Hills, PA 15025
    412-387-1001

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

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
  - **Classification according to Regulation (EU) No 2015/830**
    - The product is not classified as hazardous according to OSHA GHS regulations within the United States.
    - The product is not classified as hazardous according to the CLP regulation.

- **Information concerning particular hazards for human and environment**: 
  - The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system**:
  - The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
  - The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

- **Additional information**:
  - 0 percent of the mixture consists of component(s) of unknown toxicity
  - There are no other hazards not otherwise classified that have been identified.

- **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**
    - The product is not classified as hazardous according to OSHA GHS regulations within the United States. This product does not have a classification according to the CLP regulation.
  - **Hazard pictograms**: No hazard symbol required
  - **Signal word**: No signal word
**Hazard statements**

- Physical Hazards: Not classified as a physical hazard according to CLP criteria.
- Health Hazards: Not classified as a health hazard under CLP criteria.
- Precautionary statements: None

**HMIS Long Term Health Hazard Substances**

None of the ingredients are listed.

**2.3 Other hazards**

- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

**SECTION 3: Composition/information on ingredients**

**3.2 Mixtures**

- This material is defined as a mixture.

**Hazardous Substance (s) or Complex Substance (s) required for disclosure**

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS#</th>
<th>EC #</th>
<th>Concentration*</th>
<th>GHS Hazard Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATALYTIC DEWAXED LIGHT PARAFFINIC OIL (PETROLEUM)</td>
<td>64742-71-8</td>
<td>265-176-5</td>
<td>5 - &lt; 10%</td>
<td>H304</td>
</tr>
<tr>
<td>DINONYL NAPHTHALENESULFONIC ACID, BARIUM SALT</td>
<td>25619-56-1</td>
<td>247-132-7</td>
<td>0.1 - &lt; 1%</td>
<td>H302, H332, H315</td>
</tr>
<tr>
<td>HYDROTREATED LIGHT NAPHTHENIC DISTILLATE (PETROLEUM)</td>
<td>64742-53-6</td>
<td>265-156-6</td>
<td>10 - &lt; 20%</td>
<td>1-1304</td>
</tr>
<tr>
<td>MOLYBDENUM (IV) SULFIDE</td>
<td>1317-33-5</td>
<td>215-263-9</td>
<td>1 - &lt; 5%</td>
<td>None</td>
</tr>
<tr>
<td>NONANEDIOIC ACID DILITHIUM SALT</td>
<td>38900-29-7</td>
<td>254-184-4</td>
<td>1 - &lt; 5%</td>
<td>H302</td>
</tr>
<tr>
<td>ZINC DIALKYL DITHIOPHOSPHATE</td>
<td>68457-79-4</td>
<td>270-608-0</td>
<td>1 - &lt; 2.5%</td>
<td>H315, H318, H401, H41</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

- **General information**: No special measures required.
- **After inhalation**: Supply fresh air; consult doctor in case of complaints.
· After skin contact:
  Immediately wash with water and soap and rinse thoroughly.
  If skin irritation is experienced, consult a doctor.
· After eye contact:
  Rinse opened eye for several minutes under running water. Remove contact lenses if worn.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media
· Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
· For safety reasons unsuitable extinguishing agents: Water with full jet
· 5.2 Special hazards arising from the substance or mixture
  Formation of toxic gases is possible during heating or in case of fire.
· 5.3 Advice for firefighters
· Protective equipment:
  Wear self-contained respiratory protective device.
  Wear fully protective suit.
· Additional information No further relevant information available.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures
  Ensure adequate ventilation Particular danger of slipping on leaked/spilled product.
· 6.2 Environmental precautions:
  Do not allow to enter sewers/ surface or ground water.
· 6.3 Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Pick up mechanically.
  Dispose contaminated material as waste according to item 13.
· 6.4 Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling Store away from oxidizing agents.
· Information about fire - and explosion protection: No special measures required.
· 7.2 Conditions for safe storage, including any incompatibilities
· Storage:
  Requirements to be met by storerooms and receptacles:
  Avoid storage near extreme heat, ignition sources or open flame.
  Information about storage in one common storage facility: Store away from foodstuffs. Do not store together with oxidising and acidic materials.
  Further information about storage conditions: None.
· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.
· 8.1 Control parameters
· EXPOSURE LIMIT VALUES
· Exposure limits/standards (Note: Exposure limits are not additive)
<table>
<thead>
<tr>
<th>Substance Name</th>
<th>Form</th>
<th>Limit / Standard</th>
<th>NOTE</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATALYTIC DEWAXED LIGHT</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>N/A</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>CATALYTIC DEWAXED LIGHT PARAFFINIC OIL (PETROLEUM)</td>
<td>Inhalable fraction.</td>
<td>TWA 5 mg/m3</td>
<td>N/A</td>
<td>ACGII-1</td>
</tr>
<tr>
<td>DINOYL NAPHTHALenesulfonic acid.  BARIUM SALT [as Ba]</td>
<td>TWA</td>
<td>0.5 mg/m3</td>
<td>N/A</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>DINOYL NAPHTHALenesulfonic acid.  BARIUM SALT [as Ba]</td>
<td>TWA</td>
<td>0.5 mg/m3</td>
<td>N/A</td>
<td>ACGIH</td>
</tr>
<tr>
<td>HYDROTREATED LIGHT NAPHTHENIC DISTILLATE (PETROLEUM)</td>
<td>Mist.</td>
<td>5 mg/m3</td>
<td>N/A</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>HYDROTREATED LIGHT NAPHTHENIC DISTILLATE (PETROLEUM)</td>
<td>Inhalable fraction.</td>
<td>TWA 5 mg/m3</td>
<td>N/A</td>
<td>ACGIH</td>
</tr>
<tr>
<td>MOLYBDENUM (IV) SULFIDE [as Mo]</td>
<td>Total dust.</td>
<td>15 mg/m3</td>
<td>N/A</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>MOLYBDENUM (IV) SULFIDE [as Mo]</td>
<td>Inhalable fraction.</td>
<td>TWA 10 mg/m3</td>
<td>N/A</td>
<td>ACGIH</td>
</tr>
<tr>
<td>MOLYBDENUM (IV) SULFIDE [as Mo]</td>
<td>Respirable fraction.</td>
<td>TWA 3 mg/m3</td>
<td>N/A</td>
<td>ACGIH</td>
</tr>
</tbody>
</table>

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

No biological limits allocated.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Avoid contact with the eyes and skin.

Respiratory protection: Not required under normal conditions of use.

Protection of hands:
Gloves not required under normal conditions of use.
Wear protective gloves to handle contents of damaged or leaking units.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Safety glasses
Body protection: Not required under normal conditions of use.
Limitation and supervision of exposure into the environment No special requirements.
Risk management measures No special requirements.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Appearance:
  Form: Semi-fluid
  Colour: Dark Gray
Odour: Characteristic
Odour threshold: Not determined.
pH-value: Not determined.
Flash point: >145 °C (>293 °F)
Flammability (solid, gaseous): Not applicable.
Auto/Self-ignition temperature: Not determined
Decomposition temperature: Not determined.
Vapour pressure: <0.013 k Pa (20°C)
Density 900 kg/m³ (0.1 mm Hg) at 20°C (estimated)
Relative density 0.93 (at 15 °C)
Evaporation rate Not determined.
Viscosity:
  Dynamic: Not determined.
  Kinematic: Not determined.
Avoid transfer into the environment.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

12.6 Other adverse effects
No further relevant information available.

SECTION 10: Stability and reactivity
- REACTIVITY: See sub-sections below.
- STABILITY: Material is stable under normal conditions.
- CONDITIONS TO AVOID: Excessive heat. High energy sources of ignition.
- MATERIALS TO AVOID: Strong oxidizers
- HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.
- POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

SECTION 11: Toxicological information
- 11.1 Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values relevant for classification: None.
  - Primary irritant effect:
    - on the skin: No irritant effect.
    - on the eye: No irritating effect.
  - Sensitisation: No sensitising effects known.
  - Subacute to chronic toxicity: No further relevant information available.
  - Additional toxicological information:
    - The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
    - When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
    - May cause acne.
  - Repeated dose toxicity: No further relevant information available.
  - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): See Section 15.

SECTION 12: Ecological information
- 12.1 Toxicity
  - Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability
  - The product is partially biodegradable. Significant residuals remain.
- 12.3 Bioaccumulative potential
  - No further relevant information available.
- 12.4 Mobility in soil
  - No further relevant information available.
- Additional ecological information:
  - General notes:
    - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
Smaller quantities can be disposed of with household waste. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number
DOT, ADR, ADN, IMDG, IATA Not Regulated

14.2 UN proper shipping name
DOT, ADR, ADN, IMDG, IATA Not Regulated

14.3 Transport hazard class(es)
DOT, ADR, ADN, IMDG, IATA Not Regulated

14.4 Packing group
DOT, ADR, IMDG, IATA Not Regulated

14.5 Environmental hazards:
Marine pollutant: Not Regulated

14.6 Special precautions for user Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

UN "Model Regulation": -
SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
· United States (USA)
· SARA

Osha Hazard Communication Standard: This material is not considered hazardous in accordance with Osha HazCom 2012, 29 CFR 1910.1200

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  WHMIS: Workplace Hazardous Materials Information System (Canada)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent

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· Completed by Clark PTP Staff