1-Identification of product and supplier

**Product name:** FRANCOOL drilling oil-E

**Product use:** Lubricant

**Restrictions on Use:** None identified

**SDS Data of Preparation:** April 6, 2022

**Manufacturer:** Francool Technology (shenzhen) Co., Ltd.

**Address:** NO 31, Hebei Industrial Zone, Dalang South Road, Longhua New District, Shenzhen City, China

**Tel:** +86-0755-28130167 **FAX:** +86-0755-28130131

**Emergency telephone number:** [Weekday] +86-0755-28130167

[Night and holiday] +86-0755-28130167

2-Hazards Identification

**Hazcom GHS Classification:**

Not hazardous

**Note:** This product is a consumer product and is labeled in accordance with the china Consumer Product

**Label Elements:** None Required

3-Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Common chemical name/General name</th>
<th>CAS number</th>
<th>Concentration / Concentration range</th>
<th>Hazcom / GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severely Hydrotreated Heavy Naphthenic Oil</td>
<td>64742-52-5</td>
<td>&gt; 95%</td>
<td>No Hazardous</td>
</tr>
<tr>
<td>Non-Hazardous Ingredients</td>
<td>Mixture</td>
<td>≤5%</td>
<td>No Hazardous</td>
</tr>
</tbody>
</table>

**Note:** The exact percentages are a trade secret.

4-First Aid Measures

**Eye contact:** Flush eyes with water. If irritation occurs, seek medical attention immediately. If fluid is hot, treat burns and seek medical assistance.

**Skin contact:** Wash exposed areas with warm water and soap. If irritation occurs, seek medical attention. If fluid is hot, submerge injured area in cold water. Seek medical attention for severe burns.

**Ingestion:** Seek immediate medical attention. Do not induce vomiting. If vomiting does occur,
lower head below knees to avoid aspiration.

**Inhalation:** Remove victim from exposure. If breathing has stopped or is irregular, administer artificial respiration. If breathing difficulties persist or if victim is unconscious, seek immediate medical attention.

### 5. Fire Fighting Measures

**Extinguishing media:** Water fog, foam, dry chemical, or carbon dioxide (CO2) should be used. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

**Specific Hazards Arising from the Chemical:** Slightly combustible liquid. If heated above the flashpoint, will release flammable vapors that can present a fire or explosion hazard.

**Special Protective Equipment and Precautions for Fire-Fighters:** Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing in areas where chemicals are used and stored. Cool fire-exposed containers with water.

**Combustion Products:** Airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds.

### 6. Accidental Release Measures

**Protective Measures:** Eliminate all sources of ignition in vicinity of spilled material. Use personal protection recommended in Section 8.

**Spill Management:** Contain release to prevent further contamination of soil, surface water or groundwater. Use appropriate techniques such as non-combustible absorbent materials. Store collected material in a suitable, labeled container. Dispose of contaminated materials in a manner consistent with applicable regulations. If heated material is spilled, allow it to cool to ambient before proceeding with disposal methods. Keep area around hot, spilled material well ventilated. 

**Reporting:** Report spills to appropriate local authorities. Discharge or spills that produce a visible sheen on surface water or in waterways / sewers that lead to surface water must be reported to appropriate authorities.

### 7. Handling and Storage

**Precautions for Safe Handling:** Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing oil mists. Use with adequate ventilation. Keep away from heat, hot surfaces and open flames. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children.

**Conditions for Safe Storage:** Store in a cool, well-ventilated area, away from incompatible materials.

### 8. Exposure Controls / Personal Protection
Occupational Exposure Limits:
Severely Hydrotreated Heavy Naphthenic Oil, 5 mg/m³ TWA ACGIH TLV (Inhalable); 5 mg/m³ TWA OSHA PEL
Non-Hazardous Ingredients, None Established.

The Following Controls are Recommended for Normal Consumer Use of this Product
Engineering Controls: Use in a well-ventilated area.
Personal Protection:
Eye Protection: Avoid eye contact.
Skin Protection: Avoid prolonged skin contact. Wash hands with soap and water after use.
Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended
Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.
Personal Protection:
Eye Protection: Safety goggles recommended where eye contact is possible.
Skin Protection: Wear chemical resistant gloves.
Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. And good Industrial Hygiene practice.
Work/Hygiene Practices: Wash with soap and water after handling.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colorless to yellow transparent liquid</td>
</tr>
<tr>
<td>Flammable Limits</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic odor</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not established</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not Determined</td>
</tr>
<tr>
<td>PH</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Relative Density</td>
<td>0.82-0.92 @ 20°C</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>Not established</td>
</tr>
<tr>
<td>Solubilities</td>
<td>Insoluble in water</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>&gt;300°C</td>
</tr>
<tr>
<td>Partition Coefficient; n-octanol/water</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>≥170°C</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>Not applicable</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>VOC:</td>
<td>0%</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

- **Reactivity**: Not reactive under normal conditions
- **Chemical Stability**: Stable
- **Possibility of Hazardous Reactions**: May react with strong oxidizers generating heat.
- **Conditions to Avoid**: Avoid heat, flames and other sources of ignition.
- **Incompatible Materials**: Strong oxidizing agents.
- **Hazardous Decomposition Products**: Carbon monoxide and carbon dioxide.

11. Toxicological Information

- **Symptoms of Overexposure**:
  - **Inhalation**: High concentrations of oil mists may cause nasal and respiratory irritation.
  - **Skin Contact**: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.
  - **Eye Contact**: Contact may be irritating to eyes. May cause redness and tearing.
  - **Ingestion**: This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
- **Chronic Effects**: None expected.
- **Carcinogen Status**: None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.
- **Reproductive Toxicity**: None of the components is considered a reproductive hazard.
- **Numerical Measures of Toxicity**: The oral toxicity of this product is estimated to be greater than 5,000 mg/kg and the dermal toxicity greater than 2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria.

12. Ecological Information

- **Ecotoxicity**: No specific aquatic toxicity data is currently available, however components of this product are not expected to be harmful to aquatic organisms.
- **Persistence and Degradability**: Component are not readily biodegradable.
- **Bioaccumulative Potential**: No data available.
- **Mobility in Soil**: No data available.
- **Other Adverse Effects**: None known.
13. Disposal Consideration

**Products:** New or used uncontaminated material can be burned for fuel value in an approved facility or can be removed by a licensed waste recycler. Used product that has been contaminated with a regulated material may need to be incinerated. Refer to state and local regulations for more detailed information.

**Contaminated packaging:** Dispose of as unused product.

14. Transport Information

**DOT Surface Shipping Description:** Not Regulated

**IMDG Shipping Description:** Not Regulated

**ICAO Shipping Description:** Not Regulated

**NOTE:** DRILLING OIL does not test containers to assure that they can withstand the pressure change without leakage when transported by air. We do not recommend that our products be transported by air unless a specific review is conducted.

15. Regulation Information

**United States:**

**RCRA Hazardous Waste Number and Classification:** Not applicable

**TSCA Inventory Status:** Included

**SARA Title III Section 313 and 40 CFR 372:** Not subject to reporting requirements

**SARA Title III Section 311/312 Reportable Hazard Categories:** Immediate Health, Clean Air Act Section 112: Not classified as a Hazardous Air Pollutant (HAP)

**California Proposition 65:** This product does not contain materials which the state of California has found to cause cancer, birth defects, or other reproductive harm.

**Canada:**

**Domestic Substances List:** Listed

**WHMIS Classification:** Not controlled

**International Inventories**

**TSCA:** Product is a personal care product and regulated under FDA

**DSL:** Exempt

**NDSL:** Exempt

**Perfumes contained with the products comply with appropriate IFRA guidance.**

**TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**

**DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List**

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.
### 16. Other Information

<table>
<thead>
<tr>
<th>HMIS Hazard Rating:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health – 1 (slight hazard), Fire Hazard – 1 (slight hazard), Physical Hazard – 0 (minimal hazard)</td>
<td></td>
</tr>
</tbody>
</table>

**Preparation Date:** April 6, 2022  
**Prepared by:** Francool Technology (Shenzhen) Co., Ltd.

**Reviewed By:** Zhangjun  
**Manager of R&D Department:**