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

1.1 Product identifier
Name of the substance: Insulating Fluid Quality Sample
Synonyms: Insulating 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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC
Not classified

Adverse physicochemical, human health and environmental effects
No additional information available

2.2 Label elements according to the European Regulation (EC) No 1272/2008

Pictogram:

Warning description: Danger

Hazards:
May be fatal if swallowed and enters airways.
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautions:
Avoid release to the environment.
Do NOT induce vomiting.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting.
Store locked up.
Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
SECTION 3: Composition/information on ingredients

3.1. Substance
Specific chemical identity and/or percentage (concentration) of the composition has been withheld to protect confidentiality.

3.2. Mixture

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>EC-No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light naphthenic.</td>
<td>64742-53-6</td>
<td>265-156-6</td>
<td>30.0 – 99.9</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light naphthenic.</td>
<td>64742-55-8</td>
<td>265-158-7</td>
<td>0-45</td>
</tr>
<tr>
<td>Lubricating oil (petroleum), C15-30, hydrotreated neutral oil-based</td>
<td>72623-86-0</td>
<td>276-737-9</td>
<td>0-50</td>
</tr>
<tr>
<td>Distillates (petroleum), solvent-dewaxed light paraffinic</td>
<td>64742-56-9</td>
<td>265-159-2</td>
<td>0-10</td>
</tr>
<tr>
<td>2,6-di-tert-butyl-p-cresol</td>
<td>128.37-0</td>
<td>276-737.9</td>
<td>&lt;0.3</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).
First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
First-aid measures after skin contact : Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.
First-aid measures after eye contact : Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/injuries after inhalation : May cause respiratory irritation.
Symptoms/injuries after skin contact : May cause skin irritation.
Symptoms/injuries after eye contact : May cause eye irritation.
Symptoms/injuries after ingestion : Ingestion is likely to be harmful or have adverse effects.
Chronic symptoms : None known.

4.3. Indication of any immediate medical attention and special treatment needed
If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture
Fire hazard : Not considered flammable but may burn at high temperatures.
Explosion hazard : Product is not explosive.
Reactivity : Hazardous reactions will not occur under normal conditions.

5.3. Advice for firefighters
Precautionary measures fire : Exercise caution when fighting any chemical fire.
Firefighting instructions : Use water spray or fog for cooling exposed containers.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory
Other information: Refer to Section 9 for flammability properties.

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

**FLAMMABILITY PROPERTIES:**
Flashpoint: 289.4 °F / 143 °C Pensky-Martens Closed Cup ASTM D93/ ISO 2719
OSHA/NFPA FLAMMABILITY CLASS: 2 (combustible) (see sect. 14 for transport class)

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**General measures**
Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapour, mist, spray).

**6.1.1. For non-emergency personnel**
Protective equipment: Use appropriate personal protection equipment (PPE).
Emergency procedures: Evacuate unnecessary personnel.

**6.1.2. For emergency responders**
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up/ Spill Management

For containment
Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up
Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

**Reporting (USA Only)** Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

### 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 handling.

**Hygiene measures**
Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions / General Storage Information Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible products**

#### 7.3. Specific end use(s)

**Lubricant**

**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

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters
No additional information available

#### 8.2. Exposure controls
Appropriate engineering controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.


Materials for protective clothing: Chemically resistant materials and fabrics.
Hand protection: Wear chemically resistant protective gloves.
Eye protection: Chemical goggles or safety glasses.
Skin and body protection: Wear suitable protective clothing.
Respiratory protection: Use an approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental exposure controls: Do not allow the product to be released into the environment.
Consumer exposure controls: Do not eat, drink or smoke during use.

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Water white to pale</td>
</tr>
<tr>
<td>Odour</td>
<td>Mild petroleum odor</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>-65 °C / -85 °F ASTM D5950</td>
</tr>
<tr>
<td>Initial Boiling point and Boiling</td>
<td>285°C (&gt;545°F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>289.4 °F / 143 °C Pensky-Martens Closed Cup ASTM</td>
</tr>
<tr>
<td>D93/ ISO 2719 Ignition temperature</td>
<td>No data</td>
</tr>
<tr>
<td>available Decomposition temperature</td>
<td>No data</td>
</tr>
<tr>
<td>available Flammability (solid, gas)</td>
<td>No data</td>
</tr>
<tr>
<td>available Vapour pressure</td>
<td>&lt;0.01 kPa (room temperature)</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not Available</td>
</tr>
<tr>
<td>Relative Density @ 15.6°C</td>
<td>Not Available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

10.1. Reactivity
Hazardous reactions will not occur under normal conditions.

10.2. Chemical stability
Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Carbon oxides (CO, CO₂).
Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.

**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin sensitisation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>Not classified Carcinogenicity</td>
</tr>
<tr>
<td>: Not classified Reproductive toxicity</td>
<td></td>
</tr>
<tr>
<td>: Not classified Specific target organ toxicity (single exposure)</td>
<td></td>
</tr>
<tr>
<td>: Not classified Specific target organ toxicity (repeated exposure)</td>
<td></td>
</tr>
<tr>
<td>: Not classified Aspiration hazard</td>
<td></td>
</tr>
<tr>
<td>: Not classified</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 12: Ecological information**

12.1. Toxicity

<table>
<thead>
<tr>
<th>Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)</th>
<th>LC50 fishes 1: &gt; 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 Daphnia 1</td>
<td>&gt; 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information: Avoid release to the environment.

**SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Waste disposal recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology - waste materials: Avoid release to the environment.

**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN / ICAO / DOT/IATA

14.1. UN number

Not regulated for transport

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

Other information: No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable
SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations
Contains no REACH candidate substance
VOC content : < 1 %

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No additional information available

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

REGULATORY LISTS SEARCHED:
4.11=IARC Group 1
4.12A=IARC Group 2A
4.12B=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

The following components of this material are found on the regulatory lists indicated.
Kerosine 17, 18, 20
Kerosine, hydrosulfurized 17, 18, 20
Naphthalene 15, 16, 17, 18, 20, 4_12B

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

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
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