1. IDENTIFICATION

Product Identifier
Product Name Thermaflo® J

Other means of identification
SDS # CG-011

Synonyms
UN/ID No UN2049

Recommended use of the chemical and restrictions on use
Recommended Use Heat transfer fluid.

Details of the supplier of the safety data sheet
Supplier Address
ORG Chem Group, LLC
2406 Lynch Road
Evansville, IN 47711
www.chem-group.com

Emergency Telephone Number
Company Phone Number Non ER questions 800-489-2306 / 812-464-4446
Emergency Telephone (24 hr) Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Appearance Colorless to light yellow
Physical State Liquid
Odor Aromatic liquid

Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>2</td>
</tr>
<tr>
<td>Aspiration toxicity</td>
<td>1</td>
</tr>
<tr>
<td>Flammable Liquids</td>
<td>3</td>
</tr>
</tbody>
</table>

Hazards Not Otherwise Classified (HNOC)
May be harmful if swallowed

Signal Word
Danger
Hazard Statements
Causes skin irritation
May be fatal if swallowed and enters airways
Flammable liquid and vapor

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof equipment
Use only non-sparking tools
Take precautionary measures against static discharge

An improperly designed or maintained heat transfer system may permit the release of fluid, or air/moisture leakage into the system. This leakage could lower the fluid's flashpoint and/or produce light ends.

System leaks that result in saturated insulation may, when heated over time, create a combustible mixture when suddenly exposed to air. Leakage of fluid from the system at operating temperature and pressure may cause fluid to disperse as an aerosol, which may result in flammable concentrations of vapor in the air.

Thermal degradation or other decomposition of the fluid can occur in an improperly maintained heat transfer system, and also for other reasons, including operating the system above the fluid’s recommended operating temperature and failure to maintain proper fluid velocity. Degradation or decomposition of the fluid may also create “low boiler” hydrocarbon compounds or light ends. The occurrence of any of the foregoing conditions may lead to an increased risk of explosion and/or fire.

Precautionary Statements - Response
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
If skin irritation occurs: Get medical advice/attention
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Do not induce vomiting
IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Unknown Acute Toxicity
100% of the mixture consists of ingredient(s) of unknown toxicity
3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms Reclaimed DT-J.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylebenzene</td>
<td>25340-17-4</td>
<td>&gt;97</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

**First Aid Measures**

**General Advice**
Provide this SDS to medical personnel for treatment.

**Eye Contact**
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact**
IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

**Inhalation**
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

**Ingestion**
Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Call a physician immediately.

**Most important symptoms and effects**

**Symptoms**
May cause eye, skin and respiratory tract irritation. Aspiration may occur during swallowing or vomiting and cause lung damage.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Water spray, dry powder, foam, or carbon dioxide (CO2).

**Unsuitable Extinguishing Media**
Do not scatter spilled material with high pressure water streams.

**Specific Hazards Arising from the Chemical**
Flammable liquid and vapor. Vapors may travel to source of ignition and flash back.

**Sensitivity to Mechanical Impact**
None.

**Sensitivity to Static Discharge**
Take precautionary measures against static discharge.
Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

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

<table>
<thead>
<tr>
<th>Personal Precautions</th>
<th>Environmental Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure adequate ventilation, especially in confined areas. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).</td>
<td>Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. Collect spillage.</td>
</tr>
</tbody>
</table>

#### Methods and material for containment and cleaning up

<table>
<thead>
<tr>
<th>Methods for Containment</th>
<th>Methods for Clean-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an inert (i.e. vermiculite, dry sand or earth) absorbent material.</td>
<td>Use clean non-sparking tools to collect absorbed material. Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste disposal, see section 13 of the SDS.</td>
</tr>
</tbody>
</table>

### 7. HANDLING AND STORAGE

#### Precautions for safe handling

**Advice on Safe Handling**

Wash face, hands, and any exposed skin thoroughly after handling. Use personal protection recommended in Section 8. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin, eyes or clothing. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep containers closed when not in use. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Use spark-proof tools and explosion-proof equipment.

During use at elevated temperatures thermal decomposition leads to the formation of low-boiling and high-boiling secondary products with potentially flammable properties. When flammable liquids are concentrated and collected appropriate risk management measures must be applied.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**

Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up.

**Incompatible Materials**

Strong oxidizing agents.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure Guidelines

No exposure limits noted for ingredient(s) The following information is given as general guidance

#### Appropriate engineering controls

**Engineering Controls**

Apply technical measures to comply with the occupational exposure limits. Maintain eye wash fountain and quick-drench facilities in work area.
Individual protection measures, such as personal protective equipment

- **Eye/Face Protection**: Safety goggles.

- **Skin and Body Protection**: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

- **Respiratory Protection**: Respiratory protection is not required except in emergencies or when conditions cause excessive airborne levels, mist, or vapors. Select the appropriate approved organic vapor air-purifying respirator, self-contained breathing apparatus, or air supplied respirators in situations where there may be potential for overexposure.

**General Hygiene Considerations**: Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless to light yellow liquid</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Colorless to light yellow</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Aromatic</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Aromatic</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Not determined</td>
<td>Literature</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>-81 deg C (-114 deg F)</td>
<td>COC</td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>181 °C / 358 °F</td>
<td>Literature</td>
</tr>
<tr>
<td>Flash Point</td>
<td>59 °C / 138.2 °F</td>
<td>COC</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Liquid-not applicable</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>6.03% (V)</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined 0.67% (V)</td>
<td>Literature</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined 1mm HG</td>
<td>Literature</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>Not determined 4.5</td>
<td>Literature</td>
</tr>
<tr>
<td>Specific Gravity (H2O=1)</td>
<td>Not determined 0.865</td>
<td>Literature</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>410 °C / 770 °F</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
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<tr>
<td>Kinematic Viscosity</td>
<td>0.8</td>
<td>@ 40°C (104°F)</td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>0.98 cSt</td>
<td>@ 40°C (104°F)</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>

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### 10. STABILITY AND REACTIVITY

**Reactivity**: Not reactive under normal conditions.
Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to Avoid
Keep away from heat, sparks and open flame.

Incompatible Materials
Strong oxidizing agents.

Hazardous Decomposition Products
Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact
May cause moderate eye irritation.

Skin Contact
Causes skin irritation. Prolonged contact may cause redness and irritation.

Inhalation
Avoid breathing vapors or mists.

Ingestion
May be harmful if swallowed. May be fatal if swallowed and enters airways.

Component Information

Information on physical, chemical and toxicological effects

Symptoms
Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity
Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Aspiration hazard
May be fatal if swallowed and enters airways.

Numerical measures of toxicity
Not determined

Unknown Acute Toxicity
100% of the mixture consists of ingredient(s) of unknown toxicity.

Oral LD50
2520-5000 mg/kg (rat)

12. ECOLOGICAL INFORMATION

Ecotoxicity
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Persistence/Degradability
Not readily biodegradable.
Bioaccumulation
Not determined.

Mobility
Not determined

Other Adverse Effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging
Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No
UN2049
Proper Shipping Name
Diethylbenzene
Hazard Class
3
Subsidiary Hazard Class
III

IATA

UN/ID No
UN2049
Proper Shipping Name
Diethylbenzene
Hazard Class
3
Packing Group
III

IMDG

UN/ID No
UN2049
Proper Shipping Name
Diethylbenzene
Hazard Class
3
Packing Group
III

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylebenzene</td>
<td>Present</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
US Federal Regulations

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylebenzene 25340-17-4</td>
<td>X</td>
<td></td>
<td></td>
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</table>

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not determined</td>
<td>Not determined</td>
<td>0</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td></td>
<td></td>
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</table>

Issue Date: 13-Nov-2014
Revision Date: 6-Jul-2018
Revision Note: Update Product Name

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet