



Safety Data Sheet

Issue Date: 13-Nov-2014

Revision Date: 6-Jul-2018

Version 2

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

Skin corrosion/irritation	Category 2
Aspiration toxicity	Category 1
Flammable Liquids	Category 3

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.

Chemical Name	CAS No	Weight-%
Diethylebenzene	25340-17-4	>97

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.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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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

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

Methods and material for containment and cleaning up

Methods for Containment	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.
Methods for Clean-Up	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.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	<p>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.</p> <p>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.</p>
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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

<u>Exposure Guidelines</u>	No exposure limits noted for ingredient(s) The following information is given as general guidance
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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.
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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.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

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

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**Oral LD50**

100% of the mixture consists of ingredient(s) of unknown toxicity.
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**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Diethylebenzene	Present	X		Present		Present	X	Present	X	X

Legend:*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Diethylebenzene 25340-17-4	X		

16. OTHER INFORMATION

NFPA

Health Hazards

1

Flammability

2

Instability

0

Special Hazards

Not determined

HMIS

Health Hazards

Not determined

Flammability

Not determined

Physical Hazards

Not determined

Personal Protection

Not determined

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