1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** XCELTERM® ELECTRICAL INSULATING OIL, TYPE 2
This product meets ASTM D3487-09 “Standard Specification for Mineral Insulating Oil Used in Electrical Apparatus.”

ISO 9001:2015 Certification Number: C2018-00035

**Recommended Use**
This product is a mineral insulating oil of petroleum origin for use as an insulating and cooling medium in new and existing power and distribution electrical apparatus, such as transformers, regulators, reactors, circuit breakers, switchgear, and attendant equipment.

**National Stock Numbers (NSN):**
- 9160-01-419-0888 Gallon
- 9160-00-926-2124 Pail, 5-Gallon
- 9150-00-075-9816 Drum, 55-Gallon

**Company Identification**
Headquarters and Manufacturing Facility
Radco Industries, Inc.
700 Kingsland Drive
Batavia, IL 60510

Manufacturing Facility
Radco Industries, Inc.
39W930 Midan Drive
LaFox, IL 60147

Customer information number: 1-630-232-7966

**EMERGENCY TELEPHONE NUMBER**
Advisory Office in case of poisoning: Chemtrec
Chemtrec (North America): 1-800-424-9300

2. HAZARDS IDENTIFICATION

**Classification of mixture:** None

**Hazard Pictogram:** None

**Signal Word:** None

**Hazard Statements**
- H305: May be harmful if swallowed and enters airways.

**Precautionary Statements:**
- P301 + P315 +P331: IF SWALLOWED: Do NOT induce vomiting. Get immediate medical


This Safety Data Sheet (SDS) meets the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>%Content</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrotreated light naphthenic distillate</td>
<td>100%</td>
<td>64742-53-6</td>
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4. FIRST-AID MEASURES

**Eyes**
Immediately flush eyes with plenty of water for at least 15 minutes.

**Ingestion**
If swallowed, drink plenty of water, DO NOT induce vomiting. Immediately call a doctor.

**Inhalation**
Move to fresh air. If unconscious place in recovery position and seek medical advice. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. Remove from further exposure. Immediately call a doctor.

**Skin**
Wash exposed skin with soap and water.

5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
For small fires use carbon dioxide, dry chemical or foam.
For large fires use alcohol-type foam, universal type foam or water fog.

**Fire-Fighting Equipment**
Firefighter should wear normal protective equipment (full bunker gear) and positive-pressure contained breathing apparatus. Water can be used to cool fire-exposed containers, to protect personnel and to disperse vapors and spills. Water runoff can cause environmental damage. Dike and collect water used to fight fires.

**Special Fire-Fighting Procedures**
Use water spray to cool fire-exposed containers and structures. If a rail or tank truck is involved in a fire, isolate for 800 meters (0.5 mile) in all directions. Shut off fuel to fire if it is possible to do so without hazard. If this is impossible, withdraw from the area and let the fire burn out under controlled conditions. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire.

6. ACCIDENTAL RELEASE MEASURES

Wear protective clothing when taking up spill. Eliminate sources of ignition. This product is insoluble in water and will float on the surface. Prevent from entering sewers or drains. Should this product enter sewers or drains, it should be pumped out into an open vessel.

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7. HANDLING AND STORAGE

Handling
Do not breathe vapors/dust. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.

Storage
Do not store in open or unlabeled containers. Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Oil mist, vapor
ACGIH TLV: 5 mg/m³
OSHA PEL: 5 mg/m³

Respiratory Protection
Use with adequate ventilation. Avoid breathing vapor. If heated and ventilation is inadequate, use NIOSH certified respirator, which will protect against organic vapor.

Hand Protection
Wear clothing and gloves that cannot be penetrated by chemicals or oil.

Eye Protection
Safety glasses, chemical goggles, or face shields recommended to prevent contact.

Other Protection
Do not eat, drink, or smoke when handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Transparent liquid
Odor: Petroleum odor
Odor threshold: Not available
Auto-ignition temperature: Not available
 Decomposition temperature: Not available
Evaporation Rate (ASTM D972): Not available
Flash point Cleveland Open Cup (ASTM D92): 155°C
Flash point Pensky-Martens (ASTM D93): Not available
Flammability (solid, gas): Non-flammable
Lower flammability limit: Not available
Upper flammability limit: Not available
Initial boiling point and boiling range: > 204°C (400°F)
Melting point/freezing point: Not available
Partition coefficient (n-octanol/water), Log P_{ow}: Not available
pH: Not applicable
Solubility: Water insoluble
Relative density (ASTM D1298) 15.6°C/15.6°C: 0.88
Vapor density: Not available
Vapor pressure: < 0.1mmHg at 20°C (68°F)
Viscosity (ASTM D445):

- 59 mm²/s at 0°C (32°F)
- 9 mm²/s at 40°C (104°F)
- 2.3 mm²/s at 100°C (212°F)

10. STABILITY AND REACTIVITY INFORMATION

Materials to avoid
Exposure to materials which are highly oxidizing should be avoided.

Hazardous polymerization
Does not occur.

Hazardous decomposition products
Incomplete combustion may give various cracked and oxidized hydrocarbons.

Stability
Stable

11. TOXICOLOGICAL INFORMATION

Eye
This product may cause eye irritation.

Ingestion
This product may be harmful if swallowed.

Skin
This product may cause skin irritation.

12. ECOLOGICAL CONSIDERATIONS

Ecotoxicity data is not available.

13. DISPOSAL INFORMATION

Disposal must be in accordance with applicable federal, state, or local regulations.

Do not allow product to reach ground water, water course, or sewage systems.

This unused material, when discarded or disposed of, is not specifically listed as a hazardous waste in Federal regulations; however, it could be considered hazardous if it meets criteria for being toxic, corrosive, ignitable, or reactive according to U.S. EPA definitions (40 CFR Subpart C). This material could also become hazardous waste if it is mixed with or comes into contact with a listed hazardous waste. If it is a hazardous waste, regulations in 40 CFR 262-266, 268, 270, and 279 may apply.

“Empty” containers retain residue (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, or other sources of ignition; they may explode and cause injury or death. Do not attempt to clean since residue is difficult to remove and even a trace of remaining material constitutes as explosive hazard. “Empty” drums should be completely drained, properly bunged, and promptly returned to a drum recycler. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

14. TRANSPORT INFORMATION

This Safety Data Sheet (SDS) meets the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).
15. REGULATORY INFORMATION

California (Proposition 65)
This product does not contain any of the substances known to the State of California to cause cancer, birth defects, or reproductive harm.

CERCLA Reportable Quantity
This product is not reportable under 40 CFR Part 302.4.

Environmental Protection Agency
None of the ingredients are listed

National Toxicology Program (NTP)
None of the ingredients are listed.

OSHA Hazard Communication Standard

SARA Title III Section 302 Extremely Hazardous Substances (40 CFR Part 355)
This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA Title III Sections 311/312 Hazardous Categorization (40 CFR Part 370)
Hazardous categories for this product are: Acute= no; Chronic= no; Fire=no; Pressure=no; Reactive=no.

SARA Title III Section 313 (40 CFR Part 372)
This product is not regulated under Section 313 of SARA and 40 CFR Part 372.

U.S. Inventory (TSCA)
Listed on inventory.

Australia Inventory (AICS)
Listed on inventory.

Canada Inventory (DSL)
All of the ingredients are listed.

China (CICS)
None of the ingredients are listed.
**EC Inventory (EINECS/ELINCS)**
In Compliance

**International Agency for Research on Cancer (IARC)**
None of the ingredients are listed.

**Japan Inventory (MITI)**
Listed on inventory.

**Korea Inventory (ECL)**
Listed on inventory.

16. **OTHER INFORMATION**

| Safety Data Sheet Creation Date: | 21 April 2011 |
| Safety Data Sheet Revision Date: | 16 July 2018 |

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