



XCELTHERM® XT SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name

XCELTHERM® XT

ISO 9001:2008 Certification Number: C2012-00071

Recommended Use

Used as a heat transfer liquid in closed loop heating or cooling systems with a temperature range of -55°C to 345°C (-70°F to 650°F).

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

Chemtrec (International): 1-703-527-3887

2. HAZARDS IDENTIFICATION

Classification of mixture:

Eye Irritation, Category 1

Acute Hazards to the Aquatic Environment, Category 1

Hazard Pictograms:**Signal Word:**

WARNING

Hazard Statements:

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H401: Toxic to aquatic life.



Precautionary Statements:

- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood.
- P261: Avoid breathing fumes, vapours, and spray.
- P262: Do not get in eyes, on skin, or on clothing
- P273: Avoid release to the environment
- P301 + P315 + P330 + P331: IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. Get immediate medical attention.
- P304 + P315 + P341 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical attention.
- P305 + P315 + P338 + P351: IF IN EYES: P338: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get immediate medical attention.
- P350: Gently wash with soap and water.
- P362: Take off contaminated clothing and wash before reuse.
- P405: Store locked up.
- P501: Dispose of contents and container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	%Content	CAS Number
Alkyl aromatic	Proprietary	Proprietary
Ethylated aromatics	Proprietary	68987-42-8

4. FIRST-AID MEASURES

Eyes

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

Ingestion

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.

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

Exposure limits

None established.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

“PHYSICAL AND CHEMICAL PROPERTIES” DATA REPRESENTS TYPICAL LABORATORY SAMPLES, AND ARE NOT GUARANTEED FOR ALL SAMPLES.

Appearance:	Water white to straw yellow, clear liquid
Odor:	Mild



Odor threshold:	Not determined
Auto-ignition temperature:	803°F (428°C)
Decomposition temperature:	Not determined
Evaporation Rate:	Not determined
Flash point Cleveland Open Cup (ASTM D92):	275°F (135°C)
Flash point Pensky-Martens (ASTM D93):	255°F (124°C)
Flammability (solid, gas):	Non-flammable
Lower flammability limit:	4.2%
Upper flammability limit:	0.6%
Normal Boiling Point	522°F (272°C)
Melting point/freezing point:	Not determined
Partition coefficient (n-octanol/water), Log P _{ow} :	4.55
pH:	Not applicable
Solubility in water:	Insoluble
Specific Gravity at 25°C/25°C (77°F/77°F (ASTM D1298):	0.95 – 1.05
Vapor density:	6.5 (Air = 1)
Vapor pressure:	0.002 mmHg at 25°C (77°F)
Viscosity (ASTM D445):	300 cSt at -47°F (-44°C)

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 Contact

This product causes eye irritation.

Ingestion

Single dose oral toxicity is low. (LD50, rat, >2 g/kg). If aspirated (liquid enters the lung), may cause lung damage due to chemical pneumonia, a condition caused by petroleum and petroleum-like solvents.

Inhalation

Vapor may irritate eyes. Overexposure to high atmospheric concentrations of any aromatic hydrocarbon may produce central nervous depression, with possible effects such as increase in frequency of respiration, headache, dizziness, incoordination, nausea and loss of appetite, and loss of consciousness.



Skin Contact

A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. Prolonged exposure may cause skin irritation.

12. ECOLOGICAL CONSIDERATIONS

Components of this product are toxic to aquatic life.

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

U.S. Dept. of Transportation Shipping Name

Not regulated.

Canadian Transportation of Dangerous Goods Shipping Name

Not regulated.

European Rail/Road (ADR/RID) Shipping Name

Not regulated.

Air (ICAO/IATA) Shipping Name

Not regulated.

Sea (IMO/IMDG)

Not regulated.

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

Not hazardous per 29 CFR 1910.1200(d).

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



Radco Industries, Inc. 700 Kingsland Drive, Batavia, Illinois 60147, United States

Product Name: XCEL THERM® XT

Effective Date: 3 JANUARY 2006

Revision Date: 7 MAY 2014

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