



XCELTHERM® 315

Safety Data Sheet

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification

1.1. Identification

Trade name XCELTHERM® 315

1.2. Recommended use and restrictions on use

Use of the substance/mixture: Synthetic oil rated to 550°F (288°C) with very high resistance to oxidation as well as high resistance to sludge and fouling.

Use of the substance/mixture: Heat Transfer Fluids

Recommended use: Heat transfer fluids

1.3. Supplier

Manufacturer

Radco Industries Inc.

CAGE Code 6ZS16

700 Kingsland Drive

Batavia, Illinois 60510

United States

T (630) 232-7966

www.radcoind.com

1.4. Emergency telephone number

Emergency number: For Chemical Emergency Call CHEMTREC 24hr/day 7days/week
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-741-5970
(collect calls accepted)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Hazardous to the aquatic environment – Chronic Hazard H413 May cause long lasting harmful effects to aquatic life
Category 4

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard statements (GHS US): H413 - May cause long lasting harmful effects to aquatic life

Precautionary statements (GHS US): P273 - Avoid release to the environment.

P501 - Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients**3.1. Substances**

Not applicable

3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|-------------------------------|-----------------------|-----|--|
| Synthetic alkylated aromatic* | CAS-No.: Trade Secret | 100 | Asp. Tox. 1, H304 Aquatic Chronic 4, H413 |

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures**4.1. Description of first aid measures**

| | |
|--|--|
| First-aid measures general: | If you feel unwell, seek medical advice. |
| First-aid measures after inhalation: | Remove person to fresh air and keep comfortable for breathing. |
| First-aid measures after skin contact: | Wash skin with plenty of water. |
| First-aid measures after eye contact: | Rinse eyes with water as a precaution. |
| First-aid measures after ingestion: | Call a poison center/doctor/physician if you feel unwell. |

4.2. Most important symptoms and effects (acute and delayed)

| | |
|--------------------------------------|---|
| Symptoms/effects after inhalation: | Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. |
| Symptoms/effects after skin contact: | None under normal conditions. |
| Symptoms/effects after eye contact: | None under normal conditions. |
| Symptoms/effects after ingestion: | None under normal conditions. |

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures**5.1. Suitable (and unsuitable) extinguishing media**

| | |
|---------------------------------|--|
| Suitable extinguishing media: | Water spray. Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media: | Do not use a heavy water stream. |

5.2. Specific hazards arising from the chemical

| | |
|---|------------------------------|
| Fire hazard: | No fire hazard. |
| Explosion hazard: | No direct explosion hazard. |
| Hazardous decomposition products in case of fire: | Toxic fumes may be released. |

5.3. Special protective equipment and precautions for fire-fighters

| | |
|---------------------------------|---|
| Firefighting instructions: | Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting: | Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

| | |
|-------------------|--|
| General measures: | Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage. |
|-------------------|--|

6.1.1. For non-emergency personnel

| | |
|-----------------------|---|
| Protective equipment: | Wear recommended personal protective equipment. |
| Emergency procedures: | Ventilate spillage area. |

6.1.2. For emergency responders

| | |
|-----------------------|---|
| Protective equipment: | Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures: | Evacuate unnecessary personnel. Stop leak if safe to do so. |

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

| | |
|--------------------------|---|
| For containment: | Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk. |
| Methods for cleaning up: | Take up liquid spill into absorbent material. |
| Other information: | Dispose of materials or solid residues at an authorized site. |

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

| | |
|------------------------------------|---|
| Additional hazards when processed: | Not expected to present a significant hazard under anticipated conditions of normal use. |
| Precautions for safe handling: | Ensure good ventilation of the work station. Wear personal protective equipment. |
| Hygiene measures: | Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|----------------------|---|
| Technical measures: | Keep in a cool, well-ventilated place away from heat. |
| Storage conditions: | Keep cool. Protect from sunlight. |
| Packaging materials: | Store always product in container of same material as original container. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| |
|-------------------------------------|
| XCELTHERM® 315 |
| No additional information available |
| Synthetic alkylated aromatic |
| No additional information available |

8.2. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.
 Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

| |
|--|
| Hand protection: |
| Protective gloves |
| Eye protection: |
| Safety glasses |
| Skin and body protection: |
| Wear suitable protective clothing |
| Respiratory protection: |
| In case of insufficient ventilation, wear suitable respiratory equipment |

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-----------------|---|
| Physical state: | Liquid |
| Color: | Colorless |
| Odor: | Mixture contains one or more component(s) which have the following odour: |
| Odor threshold: | No data available |
| pH: | No data available |

| | |
|--|---------------------------------|
| Melting point: | Not applicable |
| Freezing point: | -60 °C Pour point |
| Boiling point: | ≥ 320 °C |
| Flash point: | ≥ 175 °C |
| Relative evaporation rate (butyl acetate=1): | No data available |
| Flammability: | Not applicable. |
| Vapor pressure: | < 0.01 mm Hg at 20°C |
| Vapor pressure at 50°C: | 0.07 mm Hg |
| Relative vapor density at 20°C: | No data available |
| Relative density: | 0.888 at 20°C |
| Density: | 7.23 lb/gal at 25°C |
| Molecular mass: | 320 g/mol |
| Solubility: | Insoluble in water. |
| Partition coefficient n-octanol/water (Log Pow): | No data available |
| Auto-ignition temperature: | 343 °C |
| Decomposition temperature: | No data available |
| Viscosity, kinematic: | 23.6 mm ² /s at 40°C |
| Viscosity, dynamic: | No data available |
| Explosion limits: | No data available |
| Explosive properties: | No data available |
| Oxidizing properties: | No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

XCELTHERM® 315

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|--------------------------------------|---|
| Acute toxicity (oral): | Not classified |
| Acute toxicity (dermal): | Not classified |
| Acute toxicity (inhalation): | Not classified |
| Skin corrosion/irritation: | Not classified |
| Carcinogenicity: | Not classified |
| Aspiration hazard: | Not classified |
| Viscosity, kinematic: | 23.6 mm ² /s at 40°C |
| Symptoms/effects after inhalation: | Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. |
| Symptoms/effects after skin contact: | None under normal conditions. |
| Symptoms/effects after eye contact: | None under normal conditions. |
| Symptoms/effects after ingestion: | None under normal conditions. |
| STOT-single exposure: | Not classified No data available |
| STOT-repeated exposure: | Not classified |
| Reproductive toxicity: | Not classified No data available |

| XCELTHERM® 315 | |
|------------------------|-------------------|
| LC50 Inhalation - Rat: | No data available |

| Synthetic alkylated aromatic | |
|------------------------------|-------------------|
| LD50 oral rat: | > 5000 mg/kg |
| LD50 dermal rat: | > 2000 mg/kg |
| LC50 Inhalation - Rat: | No data available |

| Synthetic alkylated aromatic | |
|-----------------------------------|----------------------|
| Skin corrosion/irritation, rabbit | mild skin irritation |
| Serious eye damage/irritation: | Not classified |

| Synthetic alkylated aromatic | |
|------------------------------------|---------------------|
| Eye irritation, rabbit | Slightly irritating |
| Respiratory or skin sensitization: | Not classified |

| Synthetic alkylated aromatic | |
|------------------------------|----------------|
| Germ cell mutagenicity: | Not classified |

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general: May cause long lasting harmful effects to aquatic life.

| Synthetic alkylated aromatic | |
|-------------------------------------|---------------------------------|
| LC50 - Fish [1]: | > 100 mg/l Literature Reference |
| LC50 - Other aquatic organisms [1]: | > 100 mg/l Literature Reference |
| EC50 - Crustacea [1]: | > 100 mg/l Literature Reference |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

| Synthetic alkylated aromatic | |
|--|-------|
| Partition coefficient n-octanol/water (Log Pow): | 5 – 7 |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation: Disposal must be done according to official regulations.
 Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.
 Sewage disposal recommendations: Disposal must be done according to official regulations.
 Product/Packaging disposal recommendations: Disposal must be done according to official regulations.
 Additional information: Do not re-use empty containers.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA / ICAO / ADN / RID / ADG

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

| | |
|------------------------------|----------------|
| Proper Shipping Name (DOT): | Not applicable |
| Proper Shipping Name (TDG): | Not applicable |
| Proper Shipping Name (IMDG): | Not applicable |
| Proper Shipping Name (IATA): | Not applicable |

14.3. Transport hazard class(es)**DOT**

| | |
|-----------------------------------|----------------|
| Transport hazard class(es) (DOT): | Not applicable |
|-----------------------------------|----------------|

TDG

| | |
|-----------------------------------|----------------|
| Transport hazard class(es) (TDG): | Not applicable |
|-----------------------------------|----------------|

IMDG

| | |
|------------------------------------|----------------|
| Transport hazard class(es) (IMDG): | Not applicable |
|------------------------------------|----------------|

IATA

| | |
|------------------------------------|----------------|
| Transport hazard class(es) (IATA): | Not applicable |
|------------------------------------|----------------|

14.4. Packing group

| | |
|-----------------------|----------------|
| Packing group (DOT): | Not applicable |
| Packing group (TDG): | Not applicable |
| Packing group (IMDG): | Not applicable |
| Packing group (IATA): | Not applicable |

14.5. Environmental hazards

| | |
|--------------------|---|
| Other information: | No supplementary information available. |
|--------------------|---|

14.6. Special precautions for user**DOT**

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

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

Not applicable

XCELTHERM® 315

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

| Name | CAS-No. | Listing | Commercial status | Flags |
|------------------------------|---------|---------|-------------------|-------|
| Synthetic alkylated aromatic | | Present | Active | |

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

XCELTHERM® 315

Listed on the Canadian DSL (Domestic Substances List)

Synthetic alkylated aromatic

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 02/20/2024

| Full text of H-phrases | |
|------------------------|--|
| H304 | May be fatal if swallowed and enters airways |
| H413 | May cause long lasting harmful effects to aquatic life |

XCELTHERM® 315

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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