



# XCELTHERM® TLX HEAVY DUTY SYSTEM CLEANER

## SAFETY DATA SHEET

Issue Date: 8 June 2015

Revision Date: 8 March 2018

Revision Number: 4.0

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier

Product Name: XCELTHERM® TLX HEAVY DUTY SYSTEM CLEANER

ISO 9001:2008 Certification Number: C2018-00035

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Cleaning agent for systems with that require removal of heavily degraded fluid that has caused excessive carbon and sludge.

#### 1.3 Details of the supplier of the safety data sheet

Headquarters and Manufacturing Facility  
Radco Industries, Inc.  
700 Kingsland Drive  
Batavia, IL 60510  
CAGE Code 6ZS16

Customer information number: 1-630-232-7966

#### 1.4 Emergency Telephone Number

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

### SECTION 2. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture:

Aquatic toxicity, acute hazards	Category 2
Aquatic toxicity, chronic hazards	Category 3
Aspiration hazard	Category 1
Serious eye damage	Category 1
Skin irritation	Category 2

Classification of mixture is in accordance with United Nations (UN) Globally Harmonized System of Classification and Labelling of Chemicals (GHS), sixth revised edition (2015), and United States Standard 29 CFR 1910 Occupational Safety and Health Standards.

See SECTION 16 for toxicity category definitions.

#### 2.1 Label elements



Hazard pictograms: Health Hazard



Corrosive



Environmental Hazard

Signal word: DANGER

#### Hazard statements

H304:	May be fatal if swallowed and enters airways.
H315:	Causes skin irritation.



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H318:	Causes serious eye damage.
H336:	May cause respiratory irritation.
H401:	Toxic to aquatic life.

**Precaution statements**

P101:	If medical advice is needed, have product container or label at hand.
P202:	Do not handle until all safety precautions have been read and understood.
P270:	Do not eat, drink or smoke when using this product.
P273:	Avoid release to the environment.
P280:	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P331 + P315:	IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. Get immediate medical advice/attention.
P303 + P353:	IF ON SKIN (or hair): Rinse skin with water/shower.
P304 + P340 + P342 + P315:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms, get immediate medical advice/attention.
P305 + P351 + P338 + P310:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
P306 + P363:	IF ON CLOTHING: Wash contaminated clothing before reuse.
P404:	Store in a closed container.
P501:	Dispose of contents/container to in accordance with local/regional/national/international regulation.

**2.2 Other hazards**

**PBT and vPvB**

PBT and vPvB assessment is not available as chemical safety assessment has not been conducted.

**NFPA Hazard ID**

Health: 1  
Flammability: 1  
Reactivity: 0

**HMIS Hazard ID**

Health: 1  
Flammability: 1  
Reactivity: 0

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**SECTION 3. Composition/information on ingredients**

**3.1 Substances**

Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine

Index number: Not available  
CAS number: 68584-24-7  
EC number: 271-531-5  
REACH number: Not available  
Synonyms: Alkylbenzene sulfonate

Distillates (petroleum), hydrotreated heavy paraffinic

Index number: 649-467-00-8  
CAS number: 64742-54-7  
EC number: 265-157-1  
REACH number: 01-2119484627-25  
Synonyms: Base oil



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Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy-

Index number: Not available  
 CAS number: 34398-01-1  
 EC number: 931-426-3  
 REACH number: Not available  
 Synonyms: --

Undecan-1-ol, ethoxylated

Index number: Not available  
 CAS number: 34398-01-1  
 EC number: 500-084-3  
 REACH number: Not available  
 Synonyms: Ethoxylated alcohol (1 to 2.5 moles);

White mineral oil (petroleum)

Index number: Not available  
 CAS number: 8042-47-5  
 EC number: 232-455-8  
 REACH number: 01-2119487078  
 Synonyms: Liquid paraffin; Technical white oil; White mineral oil; White oil;

Non-hazardous components

Index number: Not available  
 CAS number: Trade Secret  
 EC number: Trade Secret  
 REACH number: Not available  
 Synonyms: Trade Secret

**3.2 Mixtures**

**Description of mixture:**

Multicomponent mixture of synthetic base oils and additives.

Component	CAS Number	EC Number	%Content	Classification of Labeling	M-Factor
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	265-157-1	> 50%	Not classified	0
White mineral oil (petroleum)	8042-47-5	232-455-8	< 20%	Asp. Tox. 1 – H304	0
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	68584-24-7	271-531-5	< 10%	Acute Tox. 4 – H302 Eye Dam. 1 – H318	0
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy-	34398-01-1	931-426-3	< 10%	Acute Tox. 4 – H302 Aquatic chronic 3 – H412 Eye Dam. 1 – H318	0
Undecan-1-ol, ethoxylated	34398-01-1	500-084-3	< 5%	Acute Tox. 4 – H302 Aquatic Chronic 2 – H411 Eye Dam. 1 – H318 Skin Irrit. 2 – H315	1
Non-hazardous components	Trade secret	Trade secret	Trade secret	Non-hazardous	0

M-Factor determinations are in accordance with UN GHS, sixth revised edition (2015).

See SECTION 16 for full text of the toxicity categories and H-statements listed in this section.



**Indicative occupational exposure limit values**

Component	Specific Concentration limits
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	None established
Distillates (petroleum), hydrotreated heavy paraffinic	See SECTION 8 for specific concentration limits.
Undecan-1-ol, ethoxylated	None established.
White mineral oil (petroleum)	See SECTION 8 for specific concentration limits.
Non-hazardous components	None established

**SECTION 4. FIRST AID MEASURES**

**4.1 Description of first aid measures**

**Eye contact**

Upon accidental eye exposure, wash the eyes promptly with water for at least 20 minutes. If wearing contact lenses, remove them if safe to do so, and continue washing. Get medical attention immediately.

**Ingestion**

If swallowed, do not induce vomiting. Rinse mouth out with water. Get medical attention immediately.

**Inhalation**

If respiratory irritation, dizziness, or nausea occurs, move to fresh air and keep at rest in a comfortable position for breathing. If symptoms persist or unconsciousness occurs, seek immediate medical assistance.

**Skin contact**

Wash skin thoroughly with mild soap and plenty of water for at least 20 minutes. If irritation develops, seek medical advice.

**Note to physicians**

Treat symptomatically.

**4.2 Most important symptoms and effects, both acute and delayed**

**Acute symptoms**

**Eye exposure symptoms**

Direct eye exposure may lead to redness and lacrimation (crying tears).

**Ingestion symptoms**

Small amounts may cause nausea. Large amounts may lead to abdominal obstruction (cramps), constipation or diarrhea.

**Inhalation symptoms**

May cause irritation of the nose, throat, and lungs.

**Skin exposure symptoms**

Short-term exposure is not expected to cause irritation.

**Delayed symptoms**

**Eye exposure symptoms**

None expected, however seek medical attention if irritation persists.

**Ingestion symptoms**

None expected, however seek medical attention if abdominal obstruction, constipation or diarrhea persists.

**Inhalation symptoms**

None expected, however seek medical attention if respiratory irritation persists.

**Skin exposure symptoms**

Repeated exposure may lead to irritation. If rash develops, seek medical attention.

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



Suggestions for clinical testing and medical monitoring for delayed effects are not known. Use first aid when applicable, and seek guidance from a medical physician for specific treatment.

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## **SECTION 5. FIREFIGHTING MEASURES**

### **5.1 Extinguishing media**

Suitable extinguishing media includes alcohol-resistant foam, carbon dioxide, dry chemical or water fog.

### **5.2 Special hazards arising from the substance or mixture**

No data is available.

### **5.3 Advice for firefighters**

#### **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.

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

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

#### **For non-emergency personnel**

Wear personal protective equipment (PPE). Eliminate sources of ignition, if safe to do so. Avoid breathing vapors or mist. Evacuate to designated safe areas.

#### **For emergency responders**

If possible, move individual to safe area, and treat symptomatically.

### **6.2 Environmental precautions**

Contain spill, if safe to do so. Prevent from entering sewers or drains.

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

Use oil absorbent material to soak up product on the ground. Should this product enter sewers or drains, it should be pumped out into an open vessel. The recovered material should be discarded as hazardous waste.

### **6.4 Reference to other sections**

If appropriate, refer to SECTION 8 and SECTION 13 for additional information.

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## **SECTION 7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Use personal protective equipment (PPE) when handling this product. Smoking, eating and drinking should be prohibited in the application area.

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

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

### **7.3 Specific end use(s)**

Seek professional guidance before using.



## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Component	Occupational exposure limits
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	None established
Distillates (petroleum), hydrotreated heavy paraffinic	ACGIH TLV: (United States, 4/2014) TWA = 5 mg/m <sup>3</sup> 8 hours (Inhalable fraction) NIOSH PEL: (United States, 10/2013) TWA = 5 mg/m <sup>3</sup> 10 hours (Mist) NIOSH PEL: (United States, 10/2013) STEL = 10 mg/m <sup>3</sup> 15 minutes (Mist) OSHA PEL: (United States, 2/2013) TWA = 5 mg/m <sup>3</sup> 8 hours (Mist)
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega - hydroxy-	None established.
Undecan-1-ol, ethoxylated	None established.
White mineral oil (petroleum)	ACGIH TLV: (United States, 4/2014) TWA = 5 mg/m <sup>3</sup> 8 hours (Inhalable fraction) NIOSH PEL: (United States, 10/2013) TWA = 5 mg/m <sup>3</sup> 10 hours (Mist) NIOSH PEL: (United States, 10/2013) STEL = 10 mg/m <sup>3</sup> 15 minutes (Mist) OSHA PEL: (United States, 2/2013) TWA = 5 mg/m <sup>3</sup> 8 hours (Mist)

#### Biological exposure limits

None established for any of the disclosed components.

### 8.2 Exposure controls

#### Appropriate engineering controls

Practice general industrial hygiene. Do not eat, drink or smoke near product. Wash hands after handling. Remove clothing and wash separate from other laundry.

#### Personal protective equipment (PPE)

##### Eye/face protection

Safety glasses, chemical safety goggles and/or face shields are recommended when handling this product.

##### Skin protection

For extended handling, wear oil resistant gloves such as neoprene. Nitrile gloves may be appropriate for short handling periods use. Contact a government approved or accredited manufacturer for specific recommendations.

##### Other protections

Wear protective clothing ensuring minimal skin exposure. Protective clothing should be chemically impervious to oils and other solvents.

##### 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.

##### Environmental exposure controls

Do not allow product to reach ground water, water course, or sewage systems. Stop leaks, if safe to do so. Contain spills with absorbent or adsorbent materials.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance:	Clear to slightly turbid liquid
Odor:	Faint amine
Odor threshold:	Not available
Auto-ignition temperature:	Not available



Decomposition temperature:	Not determined
Evaporation Rate:	Not determined
Explosive properties:	Not determined
Flammability (solid, gas):	Not determined
Lower flammability limit:	Not available
Upper flammability limit:	Not available
Flash point Cleveland Open Cup (ASTM D92):	> 240°C (464°F)
Flash point Pensky-Martens (ASTM D93):	> 186°C (366.8°F)
Initial boiling point and boiling range:	Not determined
Melting point/freezing point:	Not determined
Oxidizing properties:	Oxidizing
Partition coefficient (n-octanol/water), Log P <sub>ow</sub> :	Not determined
pH:	Not determined
Relative density (ASTM D1298) 15.6°C/15.6°C (60°F/60°F):	0.87
Solubility in water:	< 5% w/w solubility at 25°C (77°F); gels > 5% w/w
Vapor density:	Not available
Vapor pressure:	Not determined
Viscosity (ASTM D445):	80 to 90 cSt at 40°C (104°F) 5.0 to 6.0 at 100°C (212°F)

## 9.2 Other information

No further information is available.

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## SECTION 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Non-reactive in its original state.

### 10.2 Chemical stability

Stable in its original state.

### 10.3 Possibility of hazardous reactions

Does not occur.

### 10.4 Conditions to avoid

Oxidizing materials

### 10.5 Incompatible materials

Keep away from strong oxidizing or reducing agents, including acids, caustics, chlorites (bleach), halogens and peroxides.

### 10.6 Hazardous decomposition products

Decomposition of this product under fire conditions may produce carbon oxides, phenols, sulfur oxides, sulfates, and other decomposition products.

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## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects



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Acute toxicity	Method	Species	Result
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	Dermal	--	No data available
	Inhalation	--	No data available
	Oral	Rat	LD <sub>50</sub> = 1300 mg/kg
Distillates (petroleum), hydrotreated heavy paraffinic	Dermal	Rabbit	LD <sub>50</sub> > 5000 mg/kg
	Inhalation	Rat	LC <sub>50</sub> > 5.53 mg/L after 4 hours
	Oral	Rat	LD <sub>50</sub> > 5000 mg/kg body-weight
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy-	Dermal	--	No data available
	Inhalation	--	No data available
	Oral	Rat	LD <sub>50</sub> > 1400 mg/kg
Undecan-1-ol, ethoxylated	Dermal	--	No data available
	Inhalation	--	No data available
	Oral	Rat	LD <sub>50</sub> > 1400 mg/kg
White mineral oil (petroleum)	Dermal	Rabbit	LD <sub>50</sub> > 2000 mg/kg body-weight
	Inhalation	Rat	LC <sub>50</sub> = 5 mg/L
	Oral	Rat	LD <sub>50</sub> > 5000 mg/kg body-weight
Non-hazardous components	--	--	Not expected to be hazardous

Aspiration hazard	Test Method	Species	Result
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	--	--	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 403	Rat	LC <sub>50</sub> > 5.53 mg/L after 4 hours
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy-	--	--	No data available
Undecan-1-ol, ethoxylated	--	--	No data available
White mineral oil (petroleum)	OECD 403	Rat	LC <sub>50</sub> = 1.78 mg/L
Non-hazardous components	--	--	No data available

Carcinogenicity	Test Method	Species	Result
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	--	--	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	--	--	Non-carcinogenic
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy-	--	--	No data available
Undecan-1-ol, ethoxylated	--	--	No data available
White mineral oil (petroleum)	OECD 451	Mouse	Non-carcinogenic
Non-hazardous components	--	--	Not expected to be carcinogenic.

Eye damage / irritation	Test Method	Species	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	--	--	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 405	Rabbit	Not irritating
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy-	--	--	No data available
Undecan-1-ol, ethoxylated	Read across	--	Severe eye irritation
White mineral oil (petroleum)	OECD 405	Rabbit	Not irritating
Non-hazardous components	--	--	Not expected to be hazardous.

Germ cell mutagenicity	Test Method	Species	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	--	--	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 471	<i>S. typhimurium</i>	Not mutagenic
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy-	--	--	No data available
Undecan-1-ol, ethoxylated	--	--	No data available
White mineral oil (petroleum)	OECD 474	mouse	Not mutagenic
Non-hazardous components	--	--	Not mutagenic





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Reproductive toxicity	Test Method	Species	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	--	--	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 421	Rat	NOAEL ≥ 1000 mg/kg body-weight/day
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy- Undecan-1-ol, ethoxylated	--	--	No data available
White mineral oil (petroleum)	OECD 421	Rat	NOAEL ≥ 1000 mg/kg body-weight/day
Non-hazardous components	--	--	Not expected to be toxic to reproduction.

Respiratory sensitization	Test Method	Species	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	--	--	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	--	--	No data available
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy- Undecan-1-ol, ethoxylated	--	--	No data available
White mineral oil (petroleum)	--	--	No data available
Non-hazardous components	--	--	Not sensitizing

Skin sensitization	Test Method	Species	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	--	--	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 406	Guinea pig	Not sensitizing
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy- Undecan-1-ol, ethoxylated	--	--	No data available
White mineral oil (petroleum)	OECD 406	Guinea pig	Non-sensitizing
Non-hazardous components	--	--	Not sensitizing

Skin corrosion/irritation	Test Method	Species	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	--	--	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	--	Rabbit	Not irritating
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy- Undecan-1-ol, ethoxylated	<i>Read across</i>	--	Irritant
White mineral oil (petroleum)	OECD 404	Rabbit	Not irritating
Non-hazardous components	--	--	Not expected to be hazardous.

Specific target organ toxicity (STOT)-repeated exposure	Test Method	Species	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	--	--	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	Dermal Inhalation Oral	Rat Rat Rat	NOAEL < 30 mg/kg/day NOAEL > 980 mg/m <sup>3</sup> NOAEL < 125 mg/kg/day
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy- Undecan-1-ol, ethoxylated	--	--	No data available
White mineral oil (petroleum)	Dermal Inhalation Oral	Rat Rat Rat	NOAEL = 1000 mg/kg NOEL = 50 mg/m <sup>3</sup> NOEL ≥ 20,000 ppm
Non-hazardous components	--	--	Not expected to be hazardous.

Specific target organ toxicity – single exposure (STOT-SE)	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	No data available
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy- Undecan-1-ol, ethoxylated	No data available
White mineral oil (petroleum)	No data available
Non-hazardous components	Not expected to be hazardous.

**11.2 Other information**



See SECTION 16 for toxicity references.

## SECTION 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Aquatic Toxicity	Test Method	Species	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	<i>Read across</i> <i>Read across</i>	<i>Daphnia sp.</i> <i>P. promelas</i>	EC50 = 2.5 mg/L after 48 hours LC <sub>50</sub> = 22 mg/L after 96 hours
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 202 OECD 203 (Q)SAR	<i>Daphnia sp.</i> <i>P. promelas</i> <i>O. mykiss</i>	NOEL > 10,000 mg/L NOEL ≥ 100 mg/L NOEL ≥ 1000 mg/L
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy- Undecan-1-ol, ethoxylated	--	--	No data available
White mineral oil (petroleum)	--	--	No data available
Non-hazardous components	--	--	Not expected to be hazardous.

Terrestrial Toxicity	Test Method	Species	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	--	--	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	--	--	No data available
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy- Undecan-1-ol, ethoxylated	--	--	No data available
White mineral oil (petroleum)	--	--	No data available
Non-hazardous components	--	--	Not expected to be hazardous.

### 12.2 Persistence and degradability

Biodegradation	Test Method	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	--	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	--	No data available
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy- Undecan-1-ol, ethoxylated	<i>Read across</i> <i>Read across</i>	Readily biodegradable: >60% biodegradation after 28 days
White mineral oil (petroleum)	OECD 301F	Inherently biodegradable: 31.13% biodegradation after 28 days
Non-hazardous components	--	No data available

### 12.3 Bioaccumulative potential

#### Bioconcentration Factor (BCF)

No data available

Partition Coefficient n-octanol / water (Log K <sub>ow</sub> )	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	No data available
Distillates (petroleum), hydrotreated heavy paraffinic	No data available
Poly(oxy-1,2-ethanediyl), alpha-undecyl- omega -hydroxy- Undecan-1-ol, ethoxylated	No data available
White mineral oil (petroleum)	Log K <sub>ow</sub> > 6
Non-hazardous components	No data available

### 12.4 Mobility in soil

#### Soil Mobility

No data available



## 12.5 Results of PBT and vPvB assessment

Chemical	Results
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	No chemical assessment is available.
Distillates (petroleum), hydrotreated heavy paraffinic	This substance is not PBT and vPvB.
No data available	No chemical assessment is available.
Undecan-1-ol, ethoxylated	No chemical assessment is available.
White mineral oil (petroleum)	This substance is not PBT and vPvB.
Non-hazardous components	These substances are not PBT and vPvB.

## 12.6 Other adverse effects

No further information is available

## SECTION 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

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 U.S. EPA (40 CFR Subpart C) criteria for being toxic, corrosive, ignitable, or reactive. This material could also become hazardous waste if it is mixed with or meets a listed hazardous waste. If it is a hazardous waste, regulations in 40 CFR 262-266, 268, 270, and 279 may apply.

## SECTION 14. TRANSPORTATION INFORMATION

### 14.1 UN Number

3082

### 14.2 UN proper shipping name

ENVIRONMENTALLY HAZARDOUS LIQUID, SOLID, N.O.S. (ALKYLBENZENE SULFONATE AND ETHOXYLATED ALCOHOL MIXTURE)

### 14.3 Transport hazard class

9

### 14.4 Packing group

III

### 14.5 Environmental hazards

Toxic to aquatic life.

### 14.6 Special precautions for user

See SECTION 2 for special precautions.

### 14.7 Transport in bulk per Annex II of MARPOL73/78 and the IBC Code

### 14.8 Other transport information

#### Canada Transport - Transportation of Dangerous Goods (TDG)

UN Number: UN3082  
UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS LIQUID, SOLID, N.O.S. (ALKYLBENZENE SULFONATE AND ETHOXYLATED ALCOHOL MIXTURE)  
Transport hazard class: ALCOHOL MIXTURE)  
Packing group: 9  
III



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**International Carriage of Dangerous Goods by Inland Waterways (AND)**

UN Number: UN3082  
UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS LIQUID, SOLID, N.O.S. (ALKYLBENZENE SULFONATE AND ETHOXYLATED)  
Transport hazard class: ALCOHOL MIXTURE)  
Packing group: 9  
III

**International Carriage of Dangerous Goods by Rail (RID)**

UN Number: UN3082  
UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS LIQUID, SOLID, N.O.S. (ALKYLBENZENE SULFONATE AND ETHOXYLATED)  
Transport hazard class: ALCOHOL MIXTURE)  
Packing group: 9  
III

**International Carriage of Dangerous Goods by Road (ADR)**

UN Number: UN3082  
UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS LIQUID, SOLID, N.O.S. (ALKYLBENZENE SULFONATE AND ETHOXYLATED)  
Transport hazard class: ALCOHOL MIXTURE)  
Packing group: 9  
III

**International Civil Aviation Organization (ICAO)**

Not regulated

**International Maritime Dangerous Goods Code (IMDG Code)**

UN Number: UN3082  
UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS LIQUID, SOLID, N.O.S. (ALKYLBENZENE SULFONATE AND ETHOXYLATED)  
Transport hazard class: ALCOHOL MIXTURE)  
Packing group: 9  
MARPOL73/78 and IBC Code: III  
Emergency schedules (EmS): P  
Special provisions: F-A, S-F  
274; 335; 969

**United States Department of Transportation (DOT)**

Not regulated

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## SECTION 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**Australia Inventory (AICS)**

All the ingredients are listed.

**California Proposition 65**

This product does not contain any chemicals known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

**Canadian Domestic Substances List/Non-Domestic Substances List (DSL/NDSL)**

All the ingredients are listed.

**China Inventory of Existing Chemical Substances (IECSC)**

All the ingredients are listed.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Reportable Quantity**

This product is not reportable under 40 CFR Part 302.4.

**International Agency for Research on Cancer (IARC)**



None of the ingredients are listed.

**Japan Existing and New Chemical Substances (ENCS)**

All the ingredients are listed.

**Korean Existing and Evaluated Chemical Substances (KECL)**

All the ingredients are listed.

**Philippines Inventory of Chemicals and Chemical Substances (PICCS)**

All the ingredients are listed.

**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 Section 313 (40 CFR Part 372)**

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

**SARA Title III Sections 311/312 Hazardous Categorization (40 CFR Part 370)**

Hazardous categories for this product are:

Acute = No      Chronic = Yes      Fire = No      Pressure = No      Reactive = No

**United States Toxic Substances Control Act (TSCA)**

All the ingredients are listed.

**15.2 Chemical safety assessment**

A Chemical Safety Assessment has not been conducted.

**SECTION 16. OTHER INFORMATION**

Safety Data Sheet Creation Date: 8 June 2015  
 Safety Data Sheet Revision Date: 8 March 2018  
 Revision Number: 4.0

THIS INFORMATION RELATES TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. SUCH INFORMATION STATED IS TO THE BEST OF RADCO'S KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS OF THE DATE COMPILED. HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE TO ITS ACCURACY, RELIABILITY, OR COMPLETENESS, AND RADCO DOES NOT ACCEPT LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR FROM THE USE OF THIS INFORMATION. FINAL DETERMINATION OF SUITABILITY OF ANY MATERIAL IS THE SOLE RESPONSIBILITY OF THE USER. ALL MATERIAL SHOULD BE USED WITH CAUTION TO GUARD AGAINST UNKNOWN HAZARDS. ALTHOUGH CERTAIN HAZARDS ARE DESCRIBED HEREIN, RADCO DOES NOT GUARANTEE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

XCELTHERM® is a registered trademark of Radco Industries, Inc.

**Toxicological References**

- "Distillates (petroleum), hydrotreated heavy paraffinic." *Registration Dossier - ECHA*. European Chemicals Agency, [no date]. Web. 17 May 2017.
- "White mineral oil (petroleum)." *Registration Dossier - ECHA*. European Chemicals Agency, [no date]. Web. 17 May 2017.

**Definitions**

ACGIH	American Conference of Governmental Industrial Hygienists
Acute Tox. 4	Acute toxicity, category 4
AFS 2011:18	Swedish Work Environment Authority's provisions and general recommendations on occupational exposure limit values
Asp. Tox. 1	See <i>Aspiration hazard, category 1 definition</i> .
Aspiration hazard, category 1	Hydrocarbons with kinematic viscosity ≤ 20.5 mm <sup>2</sup> /s are classified by OSHA as an aspiration hazard.



**SAFETY DATA SHEET**  
**XCELTHERM® TLX HEAVY DUTY SYSTEM CLEANER**

Issue Date: 8 June 2015  
Revision Date: 8 March 2018  
Revision: 4.0

H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage.
LC <sub>50</sub>	Lethal concentration that causes 50% death in test population.
LD <sub>50</sub>	Lethal dose that causes 50% death in test population.
NIOSH	National Institute for Occupational Safety and Health
NOAEL	No observed adverse effect level
NOEL	No observable effect level
OECD	Organisation for Economic Co-operation and Development
OECD 202	OECD Guideline 202: Daphnia sp. Acute Immobilisation Test
OECD 203	OECD Guideline 203: Fish, Acute Toxicity Test
OECD 301F	OECD Guideline 301F: Manometric Respirometry Test
OECD 403	OECD Guideline 403: Acute Inhalation Toxicity
OECD 404	OECD Guideline 404: Acute Dermal Irritation/Corrosion
OECD 405	OECD Guideline 405: Acute Eye Irritation/Corrosion Test
OECD 406	OECD Guideline 406: Skin Sensitization Test
OECD 421	OECD Guideline 421: Reproduction/Developmental Toxicity Screening Test
OECD 451	OECD Guideline 451: Carcinogenicity Studies
OECD 471	OECD Guideline 471: Bacterial Reverse Mutation Test
OECD 474	OECD Guideline 474: Mammalian Erythrocyte Micronucleus Test
PBT	Persistence Bioaccumulation and Toxicity
PEL	Permissible exposure limit
QSAR	Quantitative structure–activity relationship model
Skin Irrit. 2	<i>See Skin irritation, Category 2 for definition.</i>
Skin Irrit. 2	<i>See Skin corrosion/irritation, Category 2 for definition.</i>
Skin irritation, Category 2	Inflammation, alopecia (limited area), hyperkeratosis, hyperplasia, and scaling that fully reverses after 14 day in animal studies.
TLV	Threshold limit value
TWA	Time-weighted average
vPvB	Very persistent and very bioaccumulative