



## RADCOLUBE® RHP6083

### SAFETY DATA SHEET

MIL-PRF-6083G HYDRAULIC FLUID, PETROLEUM BASE, FOR PRESERVATION AND OPERATION

Issue Date: 1 September 2010

Revision Date: 30 March 2018

Revision Number: 4.0

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

### 1.1 Product Identifier

Product Name: RADCOLUBE® RHP6083

Specifications: MIL-PRF-6083G  
Qualification Number (Effective Date): H-6055 (2013 May 13)  
H-6057 (2014 October 31)  
H-6062 (9 August 2016)

ISO 9001:2015 Certification Number: C2018-00035

Military Symbol: OHT  
NATO Code: C-635

National Stock Numbers (NSN): 9150-00-935-9807 Quarts  
9150-00-935-9808 Gallon  
9150-00-935-9809 5 Gallon Pail  
9150-00-935-9810 55 Gallon Drum

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

This product meets the requirements for one grade of petroleum base hydraulic fluid for use in the -54°C to +135°C (-65.2°F to 275°F) temperature range. This fluid is rust inhibited and used both as a preservative for hydraulic systems and components as well as being an operational fluid. This hydraulic fluid will not be used for aircraft systems, aircraft ground support equipment, or the preservation of aircraft components.

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

Headquarters Manufacturing Facility  
Radco Industries, Inc. Radco Industries, Inc.  
700 Kingsland Drive 39W930 Midan Drive  
Batavia, IL 60510 LaFox, IL 60147  
CAGE Code 6ZS16 CAGE Code 1RVC4

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, chronic hazard Category 2  
Aspiration hazard Category 1  
Skin Irritation Category 2

### 2.1 Label elements

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**Hazard pictograms:** Health Hazard

Environmental Hazard

**Signal word:** **DANGER**

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.

**Hazard statements**

H304:	May be fatal if swallowed and enters airways.
H315:	Causes skin irritation.
H319:	Causes serious eye irritation.
H411:	Toxic to aquatic life with long-lasting effects.

**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.
P261:	Avoid breathing dust/fume/gas/mist/vapours/spray
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**

This product is not expected to be PBT and vPvB based on components.

<b>NFPA Hazard ID</b>		<b>HMIS Hazard ID</b>	
Health:	1	Health:	1
Flammability:	1	Flammability:	1
Reactivity:	0	Reactivity:	0

**SECTION 3. Composition/information on ingredients****3.1 Substances**

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1-Decene, homopolymer, hydrogenated

Index number: Not available  
 CAS number: 68037-01-4  
 EC number: 500-183-1  
 REACH number: 01-2119486452-34-XXXX  
 Synonyms: 1-Decene, dimer, hydrogenated; Polyalphaolefin

Acrylic copolymer

Index number: Not available  
 CAS number: Trade secret  
 EC number: Trade secret  
 REACH number: Not available  
 Synonyms: --

Distillate (petroleum), hydrotreated middle

Index number: 649-221-00-X  
 CAS number: 64742-46-7  
 EC number: 265-148-2  
 REACH number: 01-2119489867-12  
 Synonyms: --

Barium bis(dinonylnaphthalenesulphonate)

Index number: Not available  
 CAS number: 25619-56-1  
 EC number: 247-132-7  
 REACH number: Not available  
 Synonyms: Barium sulfonate; barium bis(2,3-dinonylnaphthalene-1-sulfonate)

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:**

Mixture of petroleum base oils and additives.

Component	CAS Number	EC Number	%Content	Classification of Labeling	M-Factor
Distillate (petroleum), hydrotreated middle	64742-46-7	265-148-2	> 50%	Acute Tox. 4 – H332 Aquatic Chronic 2 – 411 Asp. Tox. 1 – H304 Skin Irrit. 2 – H315	-- 1 -- --
1-Decene, homopolymer, hydrogenated	68037-01-4	500-183-1	< 20%	Asp. Tox. 1 – H304	--
Acrylic copolymer	Trade secret	Trade secret	< 20%	Skin Irrit. 2 – H315 Asp Tox. 2 – H332	--
Barium bis(dinonylnaphthalenesulphonate)	25619-56-1	247-132-7	< 1.0%	Skin Irrit. 2 – H315 Eye Irrit. 2 – H319	-- --
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).

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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
1-Decene, homopolymer, hydrogenated	None established
Acrylic copolymer	None established
Barium bis(dinonylnaphthalenesulphonate)	See SECTION 8 for exposure limits.
Distillate (petroleum), hydrotreated middle	See SECTION 8 for exposure 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. Can cause central nervous system depression, including as dizziness, lethargy, and drowsiness.

**Skin exposure symptoms**

Short-term exposure is not expected to cause irritation.

**Delayed symptoms****Eye exposure symptoms**

Seek medical attention if irritation persists.

**Ingestion symptoms**

Seek medical attention if abdominal obstruction, constipation or diarrhea

**Inhalation symptoms**

Seek immediate medical attention if respiratory irritation persists.

**Skin exposure symptoms**

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Repeated exposure may lead to irritation. If rash develops, immediately 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**

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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)**

Designed for use in low temperature systems ranging from -40C to 205C.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters**

Component	Occupational exposure limits
1-Decene, homopolymer, hydrogenated	None established
Acrylic copolymer	None established
Barium bis(dinonylnaphthalenesulphonate)	ACGIH TLV (United States, 3/2012) TWA = 0.5 mg/m <sup>3</sup> , 8 hours OSHA Z-1 (United States, 6/2010) PEL = 0.5 mg/m <sup>3</sup> , 8 hours
Distillate (petroleum), hydrotreated middle	ACGIH TLV: (United States, 4/2014) TWA = 5 mg/m <sup>3</sup> 8 hours (inhalable fraction) AFS 2011:18 (Sweden, 12/2011) TWA = 1 mg/m <sup>3</sup> , 8 hours AFS 2011:18 (Sweden, 12/2011) STEL = 3 mg/m <sup>3</sup> , 15 minutes NIOSH REL: (United States, 10/2013) TWA = 5 mg/m <sup>3</sup> 10 hours (mist) NIOSH REL: (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)
Non-hazardous components	None established

**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.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Appearance:	Red, clear liquid
Odor:	Odorless
Odor threshold:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Evaporation Rate (ASTM D972):	< 55% at 100°C (212°F) after 22 hours
Explosive properties:	Not available
Flammability (solid, gas):	Non-flammable
Lower flammability limit:	Not available
Upper flammability limit:	Not available
Flash point Cleveland Open Cup (ASTM D92):	Not available
Flash point Pensky-Martens Closed Cup (ASTM D93):	93°C (199.4°F)
Initial boiling point and boiling range:	> 200°C
Melting point/freezing point:	< -69°C (-92.2°F)
Oxidizing properties:	Non-oxidizing
Partition coefficient (n-octanol/water), Log P <sub>ow</sub> :	Not available
pH:	Not applicable
Relative density (ASTM D1298) 15.6°C/15.6°C (60°F/60°F):	0.85
Solubility in water:	Insoluble
Vapor density:	Not available
Vapor pressure:	Not available
Viscosity (ASTM D445):	23 mm <sup>2</sup> /s at 25°C (77°F)

**9.2 Other information**

No further information is available.

**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, aminic constituents, and other decomposition products.

**SECTION 11. TOXICOLOGICAL INFORMATION**

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**11.1 Information on toxicological effects**

Acute toxicity	Method	Species	Result
1-Decene, homopolymer, hydrogenated	Dermal	Rat	LD <sub>50</sub> > 2000 mg/kg
	Inhalation	Rat	LC <sub>50</sub> = 5.0 mg/L after 1 hour
	Oral	Rat	LD <sub>50</sub> > 2000 mg/kg
Acrylic copolymer	Dermal	Rat	LD <sub>50</sub> > 2000 mg/kg
	Inhalation	Rat	No data available
	Oral	Rat	LD <sub>50</sub> > 2000 mg/kg
Barium bis(dinonylnaphthalenesulphonate)	Dermal	Rabbit	LD <sub>50</sub> = 10,000 mg/kg
	Inhalation	Rat	NOEC = 21 mg/L after 1 hour
	Oral	Rat	LD <sub>50</sub> = 1750 mg/kg
Distillate (petroleum), hydrotreated middle	Dermal	Rabbit	LD <sub>50</sub> > 2000 mg/kg body weight
	Inhalation	Rat	LC <sub>50</sub> = 1.78 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
1-Decene, homopolymer, hydrogenated	OECD 403	Rat	Aspiration hazard, Category 1
Acrylic copolymer	--	--	No data available
Barium bis(dinonylnaphthalenesulphonate)	--	--	No data available
Distillate (petroleum), hydrotreated middle	OECD 403	Rat	Aspiration hazard, category 1
Non-hazardous components	--	--	Not expected to be hazardous.

Carcinogenicity	Results
1-Decene, homopolymer, hydrogenated	Not classified as carcinogen by IARC, NTP and OSHA.
Acrylic copolymer	Not classified as carcinogen by IARC, NTP and OSHA.
Barium bis(dinonylnaphthalenesulphonate)	No data available
Distillate (petroleum), hydrotreated middle	Not expected to be carcinogenic.
Non-hazardous components	Not classified as carcinogens by IARC, NTP and OSHA.

Eye damage / irritation	Test Method	Species	Results
1-Decene, homopolymer, hydrogenated	OECD 405	Rabbit	Not irritating
Acrylic copolymer	--	--	Irritant
Barium bis(dinonylnaphthalenesulphonate)	--	--	Irritating
Distillate (petroleum), hydrotreated middle	OECD 405	Rabbit	Not irritating
Non-hazardous components	--	--	Not expected to be hazardous.

Germ cell mutagenicity	Test Method	Species	Results
1-Decene, homopolymer, hydrogenated	OECD 471	<i>S. typhimurium</i>	Not mutagenic
Acrylic copolymer	--	--	No data available
Barium bis(dinonylnaphthalenesulphonate)	--	--	No data available
Distillate (petroleum), hydrotreated middle	--	--	No data available
Non-hazardous components	--	--	No data available

Reproductive toxicity	Test Method	Species	Results
1-Decene, homopolymer, hydrogenated	OECD 415	Rat	No reproductive harm
Acrylic copolymer	--	--	No data available
Barium bis(dinonylnaphthalenesulphonate)	--	--	No data available
Distillate (petroleum), hydrotreated middle	--	--	No data available
Non-hazardous components	--	--	No data available

**Respiratory sensitization**

No data available



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Skin sensitization	Test Method	Species	Results
1-Decene, homopolymer, hydrogenated	OECD 406	Guinea pig	Not sensitizing
Acrylic copolymer	--	--	No data available
Barium bis(dinonylnaphthalenesulphonate)	--	--	Not sensitizing
Distillate (petroleum), hydrotreated middle	OECD 406	Guinea pig	Not sensitizing
Non-hazardous components	--	--	Not expected to be sensitizing.

Skin corrosion/irritation	Test Method	Species	Results
1-Decene, homopolymer, hydrogenated	OECD 404	Rabbit	Not irritating
Acrylic copolymer	--	--	Irritant
Barium bis(dinonylnaphthalenesulphonate)	--	--	Irritant
Distillate (petroleum), hydrotreated middle	OECD 404	Rabbit	Not irritating
Non-hazardous components	--	--	Not expected to be irritating.

Specific target organ toxicity (STOT)-repeated exposure	Method	Species	Results
1-Decene, homopolymer, hydrogenated	--	--	No data available
Acrylic copolymer	--	--	No data available
Barium bis(dinonylnaphthalenesulphonate)	--	--	No data available
Distillate (petroleum), hydrotreated middle	Oral	Rat	NOAEL ≥ 5 mL/kg body weight per day
Non-hazardous components	--	--	Not expected to be hazardous.

Specific target organ toxicity (STOT)-single exposure	Results
1-Decene, homopolymer, hydrogenated	No data available
Acrylic copolymer	STOT single exposure, Category 3
Barium bis(dinonylnaphthalenesulphonate)	No data available
Distillate (petroleum), hydrotreated middle	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
1-Decene, homopolymer, hydrogenated	OECD 203 OECD 211 DIN 38412-8	<i>D. magna</i> <i>O. mykiss</i> <i>P. putida</i>	NOEL = 125 mg/L after 21 days LL <sub>50</sub> > 1000g/L after 96 hours EC <sub>50</sub> > 10g/L after 16 hours
Acrylic copolymer	Not reported	<i>L. macrochirus</i>	LC <sub>50</sub> = 2.2 mg/L after 96 hours
Barium bis(dinonylnaphthalenesulphonate)	OECD 201 OECD 202 Not reported	Algae <i>Daphnia sp.</i> Fish	EC <sub>10</sub> = 0.16 mg/L after 72 hours NOEC = 0.27 mg/L after 48 hours LC <sub>50</sub> > 0.28 mg/L after 96 hours
Distillate (petroleum), hydrotreated middle	OECD 201 OECD 203 QSAR model	Algae <i>O. mykiss</i> <i>D. magna</i>	NOEL = 10 mg/L after 752 hours LL <sub>50</sub> > 1000 mg/L after 24 hours NOEL = 0.163 mg/L
Non-hazardous components	--	--	Not expected to be hazardous.

Terrestrial Toxicity	Test Method	Species	Results
1-Decene, homopolymer, hydrogenated	OECD 222	<i>Earthworm</i>	LC <sub>50</sub> > 1000 mg/kg after 56 days
Acrylic copolymer	--	--	No data available
Barium bis(dinonylnaphthalenesulphonate)	--	--	No data available
Distillate (petroleum), hydrotreated middle	QSAR model	<i>Mallard duck</i>	NOEL > 5000ppm
Non-hazardous components	--	--	Not expected to be hazardous.

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**12.2 Persistence and degradability**

Biodegradation	Test Method	Results
1-Decene, homopolymer, hydrogenated	OECD 301B	Not readily biodegradable
Acrylic copolymer	--	No data available
Barium bis(dinonylnaphthalenesulphonate)	OECD 301B	Not readily biodegradable
Distillate (petroleum), hydrotreated middle	--	No data available
Non-hazardous components	--	No data available

**12.3 Bioaccumulative potential**

Bioconcentration Factor (BCF)	Results
1-Decene, homopolymer, hydrogenated	No data available
Acrylic copolymer	No data available
Barium bis(dinonylnaphthalenesulphonate)	No data available
Distillate (petroleum), hydrotreated middle	BCF < 500
Non-hazardous components	No data available

Partition Coefficient n-octanol / water (Log K <sub>ow</sub> )	Results
1-Decene, homopolymer, hydrogenated	Log K <sub>ow</sub> = 10.09
Acrylic copolymer	No data available
Barium bis(dinonylnaphthalenesulphonate)	Log K <sub>ow</sub> = 6.7
Distillate (petroleum), hydrotreated middle	Log K <sub>ow</sub> > 4
Non-hazardous components	No data available

**12.4 Mobility in soil**

Soil Mobility	Results
1-Decene, homopolymer, hydrogenated	No data available
Acrylic copolymer	No data available
Barium bis(dinonylnaphthalenesulphonate)	Log K <sub>ow</sub> = 5.24
Distillate (petroleum), hydrotreated middle	Log K <sub>ow</sub> > 3.0
Non-hazardous components	No data available

**12.5 Results of PBT and vPvB assessment**

Chemical	Results
1-Decene, homopolymer, hydrogenated	The substance is not PBT / vPvB.
Acrylic copolymer	The substance is not PBT / vPvB.
Barium bis(dinonylnaphthalenesulphonate)	The substance is not PBT / vPvB.
Distillate (petroleum), hydrotreated middle	The substance is not PBT / vPvB.
Non-hazardous components	These substances are not PBT / vPvB.

**12.6 Other adverse effects**

Chemical	Results
1-Decene, homopolymer, hydrogenated	No data available
Acrylic copolymer	No other adverse effects are known.
Barium bis(dinonylnaphthalenesulphonate)	Hydrolyses half-life in water is 1 year.
Distillate (petroleum), hydrotreated middle	Spills may hinder oxygen transfer in aquatic environments.
Non-hazardous components	No adverse effects are expected.

**SECTION 13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

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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.

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**SECTION 14. TRANSPORTATION INFORMATION****United States Department of Transportation (DOT)**

Not regulated

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

UN Number: 3082  
UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DISTILLATE (PETROLEUM), HYDROTREATED MIDDLE MIXTURE)  
Transport hazard class: 9  
Packing group: III

**International Air Transport Association (IATA)**

Not regulated

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

UN Number: UN3082  
UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DISTILLATE (PETROLEUM), HYDROTREATED MIDDLE MIXTURE)  
Transport hazard class: 9  
Packing group: III  
MARPOL73/78 and IBC Code: P

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

UN Number: UN3082  
UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DISTILLATE (PETROLEUM), HYDROTREATED MIDDLE MIXTURE)  
Transport hazard class: 9  
Packing group: III

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

UN Number: UN3082  
UN Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DISTILLATE (PETROLEUM), HYDROTREATED MIDDLE MIXTURE)  
Transport hazard class: 9  
Packing group: III

**International Civil Aviation Organization (ICAO)**

Not regulated

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

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

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**SECTION 15. REGULATORY INFORMATION**

**SAFETY DATA SHEET**

RADCOLUBE® RHP6083

MIL-PRF-6083G HYDRAULIC FLUID, PETROLEUM BASE, FOR PRESERVATION AND OPERATION

Issue Date: 1 September 2010

Revision Date: 30 March 2018

Revision: 4.0

**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 = Yes      Chronic = No      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.

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**SECTION 16. OTHER INFORMATION**

Safety Data Sheet Creation Date: 1 September 2010

Safety Data Sheet Revision Date: 30 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

**SAFETY DATA SHEET****RADCOLUBE® RHP6083**

MIL-PRF-6083G HYDRAULIC FLUID, PETROLEUM BASE, FOR PRESERVATION AND OPERATION

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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.

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

**Toxicological References**

"Distillate (petroleum), hydrotreated middle." *Registration Dossier - ECHA*. European Chemicals Agency, [no date]. Web. 17 Apr. 2017.

"Barium bis(di C8-C10, branched, C9 rich, alkyl naphthalenesulphonate)." *Registration Dossier - ECHA*. European Chemicals Agency, [no date]. Web. 17 Jan. 2018.

*Globally Harmonized System of Classification and Labelling of Chemicals: (GHS)*. 6th ed. New York: United Nations, 2015. Print.

**Definitions**

ACGIH	Association Advancing Occupational and Environmental Health
AFS 2011:18	Swedish Work Environment Authority's provisions and general recommendations on occupational exposure limit values
Aquatic Chronic 2	Aquatic toxicity, chronic hazards, category 2
Aquatic Tox. 4	Aquatic toxicity, acute hazards, category 4
Asp. Tox. 1	See <i>Aspiration hazard, category 1 definition</i> .
Aspiration hazard, category 1	Hydrocarbons with kinematic viscosity $\leq 20.5$ mm <sup>2</sup> /s are classified by OSHA as an aspiration hazard.
DIN 38412-8	German Standards for the Examination of Water, Waste Water and Sludge ...
EC number	European Community number
EC <sub>50</sub>	Concentration that effects 50% of the test population.
EU	European Union
Eye Irrit. 2	See <i>Eye irritation, category 2 definition</i> .
Eye irritation, category 2	Potential for reversible eye irritation within 21 days in animal studies.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation
H332	Harmful if inhaled.
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
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.
LL <sub>50</sub>	Loading rate that causes 50% death in test population.
M-Factor	Multiplying factor for substances that are toxic to aquatic environment.
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NOAEL	No observed adverse effect level
NOEC	No observable effect concentration
OECD	Organisation for Economic Co-operation and Development
OECD 202	OECD Guideline 202: <i>Daphnia sp.</i> Acute Immobilisation Test
OECD 203	OECD Guideline 203: Fish, Acute Toxicity Test
OECD 211	OECD Guideline 211: <i>Daphnia magna</i> Reproduction Test
OECD 222	OECD Guideline 222: Earthworm Reproduction Test ( <i>Eisenia fetida</i> / <i>Eisenia andrei</i> )
OECD 301B	OECD Guideline 301 B: (Ready Biodegradability: CO <sub>2</sub> Evolution Test)
OSHA	United States Department of Labor Occupational Safety and Health Administration
PBT	Persistence Bioaccumulation and Toxicity
PEL	Permissible exposure limit
QSAR model	Quantitative structure–activity relationship model
Skin Irrit. 2	See <i>Skin 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
UN	United Nations
US	United States of America
vPvB	Very persistent and very bioaccumulative