



**RADCOLUBE® SBR-1  
SAFETY DATA SHEET**

**MIL-PRF-46176B BRAKE FLUID, SILICONE, AUTOMOTIVE, ALL-WEATHER, OPERATIONAL AND PRESERVATIVE**

## 1. PRODUCT AND COMPANY IDENTIFICATION

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### Product Name

RADCOLUBE® SBR-1

This product meets Military Specification MIL-PRF-46176B and US DOT 5

Qualification# SBF-1026 Dated: 17 JANUARY 2012

ISO 9001:2008 Certification Number: C2015-00068

### Recommended Use

This product is a silicone-based hydraulic brake fluid for use in hydraulic brake systems at ambient temperatures ranging from -55°C to +55°C (-67°F to 131°F). This product is identified by military symbol BFS and NATO code No. H-547.

### National Stock Numbers (NSN):

9150-01-102-9455      Gallon

9150-01-123-3152      5 Gallon Pail

9150-01-072-8379      55 Gallon Drum

### Company Identification

Headquarters (CAGE Code 6ZS16)

Radco Industries, Inc.

700 Kingsland Drive

Batavia, IL 60510

Manufacturing Facility (CAGE Code 1RVC4)

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

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Classification of mixture:

Eye irritation, Category 2A

Skin irritation, Category 2A

Hazard Pictograms:





**Signal Word** WARNING

**Hazard Statements:**

H303:	May be harmful if swallowed.
H315 + H320:	Causes eye and skin irritation.

**Precautionary Statements:**

P202:	Do not handle until all safety precautions have been read and understood.
P273:	Avoid release to the environment.
P281:	Use personal protective equipment as required.
P301 + P331:	IF SWALLOWED: Do NOT induce vomiting
P305 + P351:	IF IN EYES: Rinse cautiously with water for several minutes.
P350:	Gently wash with soap and water.
P362:	Take off contaminated clothing and wash before reuse.
P405:	Store locked up.
P501:	Dispose of contents/container to an approved waste disposal plant.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Components	%Content	CAS Number
Polydimethylsiloxane	Balance	63148-62-9
Tributyl Phosphate	< 10%	126-73-8
Bis(2-ethylhexyl) sebecate	< 10%	122-62-3

**4. FIRST-AID MEASURES**

**Eyes**

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

**Ingestion**

If swallowed, do NOT induce vomiting. Get medical attention immediately.

**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 skin thoroughly with mild soap and plenty of water for at least 15 minutes.

**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

### Bis(2-ethylhexyl) sebecate CAS# 122-62-3

None established

### Polydimethylsiloxane, CAS# 63148-62-9

None established

### Tributyl phosphate vapor, CAS# 126-73-8

TLV (ACGIH): 5 mg/m<sup>3</sup>

### 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:	Violet viscous fluid
Odor:	Odorless
Odor threshold:	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Evaporation Rate (ASTM D972):	Not determined
Flash point Cleveland Open Cup (ASTM D92):	204°C (399°F)



Flash point Pensky-Martens (ASTM D93):	Not determined
Flammability (solid, gas):	Non-flammable
Lower flammability limit:	Not determined
Upper flammability limit:	Not determined
Initial boiling point and boiling range:	Not determined
Melting point/freezing point:	Not determined
Partition coefficient (n-octanol/water), Log P <sub>ow</sub> :	Not determined
pH:	Not applicable
Solubility in water:	1.5 µg/mL at 20°C (68°F)
Relative density (ASTM D1298) 15.6°C/15.6°C:	0.94
Vapor density:	Not Determined
Vapor pressure:	< 0.23 mmHg at 20°C (68°F)
Viscosity (ASTM D445):	> 1.3 mm <sup>2</sup> /s at 100°C (212°F) < 900 mm <sup>2</sup> /s at -55°C (-67°F)

## 10. STABILITY AND REACTIVITY INFORMATION

### Conditions to avoid

Heat and open flame

### Materials to avoid

Strong oxidizing agents

### Hazardous polymerization

Does not occur.

### Hazardous decomposition products

Decomposition of this product under fire conditions can produce carbon dioxide, carbon monoxide, phenol, phosphoric acid, phosphorus oxides, and other organic decomposition products.

### Stability

Stable

## 11. TOXICOLOGICAL INFORMATION

### Bis(2-ethylhexyl) sebecate Oral LD50, rat

9,500 mg/kg

### Tributyl phosphate Dermal LD50, rabbit

> 4,640 mg/kg

### Tributyl phosphate Oral LD50, rat

3,160 mg/kg

### Carcinogenicity (Tributyl Phosphate)

Not classified as a carcinogen by USA OSHA

### Reproductive toxicity (Tributyl Phosphate)

In a two generation reproductive toxicity study, rats were dosed with Tributyl phosphate at concentrations of 15, 53 or 225 mg/kg/day. There was no adverse effect on fertility or reproduction at any dose. The NOEL was greater than 3000 parts per million.



## 12. ECOLOGICAL CONSIDERATIONS

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Ecological data is not available.

## 13. DISPOSAL INFORMATION

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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

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### 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.

### International Civil Aviation Organisation and International Air Transport Association (ICAO/IATA) Shipping Name

Not regulated.

### International Maritime Dangerous Goods (IMDG) and International Maritime Dangerous Goods (IMDG)

Not regulated.

## 15. REGULATORY INFORMATION

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### 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**

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Safety Data Sheet Creation Date: 17 January 2012

Safety Data Sheet Revision Date: 21 May 2015

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