



SAFETY DATA SHEET

Section 1: Identification of the Substance/Preparation and the Company/Undertaking

1.1 Product Identifier

Trade Name **Heavy Duty DOT 5 Silicon Brake Fluid**
SDS #: 2006-C
SDS Date 3 November 2017

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: Synthetic Brake Fluid
Uses Advised Against: None

1.3 Details of the Supplier of the Substance or Mixture

Manufacturer: **Intercontinental Lubricants Corp./ Spectro Oils of America**
993 Federal Road
Brookfield, CT 06804

1.4 Emergency Telephone Number

Emergency Spill Information +1 (352) 323-3500 (International)
+1 (800) 535-5053 (US and Canada)
Other Product Information: +1(203) 775-1291

Section 2: Hazards Identification

2.1 Classification of the Substance or Mixture

CLP/GHS Classification (1272/2008):

Carcinogen Category 2 H351

2.2 Label Elements

Warning!



Contains tributyl phosphate

H351 Suspected of causing cancer.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves.

P308 + P313 IF exposed or concerned: Get medical attention.

P405 Store locked up.

P501 Dispose of contents and container in accordance with local and national regulations.

2.3 Other Hazards: None

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Section 3: Composition/Information on Ingredients

3.2 Mixtures

Chemical Name	CAS Number	EINECS Number	% (w/w)	CLP/GHS Classification (1272/2008)
Dimethyl siloxane, trimethylsiloxy-terminated	63148-62-9	Not applicable	90-100	Not hazardous
Tributyl Phosphate	126-73-8	240-8002	1-5	Acute Tox 4 H302 Skin Irrit 2 H315 Carc 2 H351 Aquatic Chronic 2 H412

See Section 16 for full text of GHS Classifications.

Section 4: First Aid Measures

4.1 Description of First Aid Measures

First Aid

Eye Contact: Flush eye with water for several minutes holding the eyelids apart. Get medical attention if irritation persists.

Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation develops.

Inhalation: Remove victim to fresh air. If irritation develops or breathing is difficult, get medical attention.

Ingestion: Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

See Section 11 for more detailed information on health effects.

4.2 Most Important symptoms and effects, both acute and delayed: May cause mild eye irritation. Prolonged skin contact may cause irritation. Excessive inhalation of vapor or mists may cause upper respiratory tract irritation and central nervous system effects. Swallowing may cause nausea, vomiting and diarrhea. May cause cancer based on animal data.

4.3 Indication of any immediate medical attention and special treatment needed: None required under normal conditions of use.

Section 5: Firefighting Measures

5.1 Extinguishing Media: Use water fog, alcohol foam, carbon dioxide, dry chemical to extinguish.

5.2 Special Hazards Arising from the Substance or Mixture

Unusual Fire and Explosion Hazards: Not classified as a combustible liquid but will burn under fire conditions. At elevated temperatures containers may rupture.

Combustion Products: Combustion may produce carbon, silicone and phosphorus oxides and formaldehyde.

5.3 Advice for Fire-Fighters: Firefighters should wear full emergency equipment and a NIOSH approved positive pressure self-contained breathing apparatus. Cool exposed intact containers with water spray.

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Avoid eye and prolonged skin

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contact. Avoid breathing vapors and mists. Wash thoroughly after handling. Remove contaminated clothing and launder before re-use.

6.2 Environmental Precautions: Prevent entry in storm sewers and waterways. Report spill as required by local and national regulations.

6.3 Methods and Material for Containment and Cleaning Up: Collect with inert material and place in a container for disposal. Clean slippery residue by washing with mild detergent and water.

6.4 Reference to Other Sections: Refer to Section 8 for personal protective equipment and Section 13 for disposal information

Section 7: Handling and Storage

7.1 Precautions for Safe Handling: Avoid eye and prolonged skin contact. Wash thoroughly after handling. Use with adequate ventilation. Do not eat, drink or smoke in the work area. Remove contaminated clothing and launder before re-use.

7.2 Conditions for Safe Storage, Including any Incompatibilities: Store in a cool area away from oxidizers and other incompatible materials. Protect containers from physical damage.

Empty containers retain product residues. Do not cut, weld, braze, etc. on or near empty containers. Follow all SDS precautions in handling empty containers

7.3 Specific end use(s):

Industrial uses: None identified

Professional uses: Synthetic Brake Fluid

Section 8: Exposure Controls/Personal Protection

8.1 Control Parameters:

Chemical Name	US OEL	EU IOEL	UK OEL	Biological Limit Value
Dimethyl siloxane, trimethylsiloxy-terminated	None Established	None Established	None Established	None Established
Tributyl Phosphate	None Established	None Established	5 mg/m ³ TWA	None Established

8.2 Exposure Controls:

Recommended Monitoring Procedures: None

Appropriate Engineering Controls: Good general room ventilation (equivalent to outdoors) should be adequate under normal conditions. If the recommended exposure limit is exceeded increased mechanical ventilation such as local exhaust may be required.

Personal Protective Measurers

Eye/face Protection: Safety glasses or goggles recommended to avoid eye contact. . In the EU follow European Standard EN 166.

Skin Protection: Impervious apron, boots and other clothing are recommended if needed to avoid prolonged skin contact.

Hands: Rubber or other impervious gloves are recommended where prolonged or repeated skin contact is likely. In the EU, follow European Standard EN 374.

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Respiratory Protection: None needed under normal use conditions with adequate ventilation. If the exposure limit is exceeded or irritation is experienced, use an approved respirator with particulate pre-filters (R or P series). For higher concentrations an approved supplied air respirator (with escape bottle if required) or self-contained breathing apparatus may be required. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with applicable regulations and good Industrial Hygiene practice. In the EU, follow European Standard EN 147.

Other protection: Suitable washing facilities should be available.

Section 9: Physical and Chemical Properties

9.1 Information on basic Physical and Chemical Properties

Appearance (physical state, color, etc.): Purple liquid

Odor: Slight odor.

Odor threshold: Not available	pH: Not available
Melting point/Pourpoint: Not available	Boiling Point: >35°C (>95°F)
Flash point: >101.1°C (214°F) CC	Viscosity: 20 cST @ 40°C
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: Not available	UEL: Not available
Vapor pressure: Not available	Vapor density (air =1): Not available
Relative density: 0.95	Solubility(ies): Not available
Partition coefficient: n-octanol/water: Not available	Auto-ignition temperature: Not available
Decomposition temperature: Not available	Evaporation rate: Not available
Oxidizing Properties: None	Explosive Properties: None

9.2 Other Information: None

Section 10: Stability and Reactivity

10.1 Reactivity: This product is not expected to react.

10.2 Chemical Stability: The product is stable.

10.3 Possibility of Hazardous Reactions: When heated above 150°C (302°F) in the presence of air, trace quantities of formaldehyde may be released.

10.4 Conditions to Avoid: Avoid excessive heat.

10.5 Incompatible Materials: Avoid oxidizing agents.

10.6 Hazardous Decomposition Products: Thermal decomposition may yield carbon, silicone and phosphorus oxides and formaldehyde.

Section 11: Toxicological Information

11.1 Information on Toxicological Effects:

Potential Health Effects:

Inhalation: Excessive inhalation of vapors or mists may cause upper respiratory tract irritation.

Skin Contact: Prolonged or repeated contact may cause irritation.

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Eye Contact: May cause mild irritation with redness and tearing.

Ingestion: Swallowing large amounts may cause gastrointestinal effects including nausea and diarrhea.

Acute Toxicity Estimates: Oral: >5000 mg/kg, Dermal>2000 mg/kg

Dimethyl siloxane, trimethylsiloxy-terminated: Oral rat LD50 >15,400 mg/kg, Dermal rabbit LD50 >2000 mg/kg

Tributyl phosphate: Oral rat LD50 1552 mg/kg, Inhalation rat LC50 >4.2 mg/L (dust/mist), Dermal rabbit LD50 >3100 mg/kg

Skin corrosion/irritation: Tributyl phosphate is classified as a skin irritation. This product is not expected to cause skin irritation.

Eye damage/ irritation: None of the components are classified as eye irritants. This product is not expected to cause eye irritation.

Respiratory Irritation: No data available. This product is not expected to cause respiratory irritation.

Respiratory Sensitization: No data available for mixture. Components are not classified as respiratory sensitizers.

Skin Sensitization: None of the components are known to cause sensitization in animals or humans.

Germ Cell Mutagenicity: This product is not expected to cause mutagenic activity.

Carcinogenicity: Tributyl phosphate is classified as a Carcinogen Category 2 the EU CLP. None of the other components are listed as a carcinogen or suspect carcinogen by NTP, IARC or the EU CLP.

Reproductive Toxicity: This product is not expected to cause reproductive or developmental effects.

Specific Target Organ Toxicity:

Single Exposure: No data available

Repeat Exposure: No data available

Aspiration Toxicity: This product does not meet the criteria for an aspiration hazard.

Section 12: Ecological Information

12.1 Toxicity:

Dimethyl siloxane, trimethylsiloxy-terminated: 48 hr EC50 daphnia magna >200 mg/L

Tributyl phosphate: 96 hr LC50 Oncorhynchus mykiss 11 mg/L, 48 hr EC50 daphnia magna 3.65 mg/L, 72 hr EC50

Desmodemus subspicatus 0.92 mg/L

12.2 Persistence and degradability: Tributyl phosphate is readily biodegradable.

12.3 Bioaccumulative Potential: Tributyl phosphate has a BCF of 6.9-20. This suggests the potential for bioaccumulation is low.

12.4 Mobility in Soil: No data available

12.5 Results of PVT and vPvB assessment: Components do not meet the criteria of PBT or vPvB.

12.6 Other Adverse Effects: None known.

Section 13: Disposal Considerations

13.1 Waste Treatment Methods:

Dispose in accordance with local, state and national regulations.

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Section 14: Transportation Information

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT	None	Not Regulated			
Canadian TDG	None	Not Regulated			
EU ADR/RID	None	Not Regulated			
IMDG	None	Not Regulated			
IATA/ICAO	None	Not Regulated			

14.6 Special Precautions for User: None

14.7 Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code: Not applicable – product is transported only in packaged form.

Section 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

INTERNATIONAL INVENTORIES

US EPA TSCA Inventory: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

Australia: All of the components of this product are listed on the Australian Inventory of Chemical Substances.

Canada: All of the components of this product are listed on the Canadian Domestic Substances List (DSL).

China IECSC: All of the components of this product are listed on the Inventory of Existing Chemical Substances in China.

European Union: All of the components are listed on the European Inventory of New and Existing Chemical Substances (EINECS) inventory.

Japan ENCS: All of the components of this product are listed on the Japanese Existing and New Chemical Substances (METI) List.

German WGK: 1

Section 16: Other Information

Revision History: New Reach compliant SDS

CLP/GHS Classification and H Phrases for Reference (See Section 3)

Acute Tox 4 Acute Toxicity Category 4

Skin Irrit 2 Skin Irritation Category 2

Carc 2 H351 Carcinogen Category 2

Aquatic Chronic 2 Aquatic Chronic Category 2

H302 Harmful if swallowed.

H315 Causes skin irritation.

H351 Suspected of causing cancer.

H412 Harmful to aquatic life with long lasting effects.