



## Material Safety Data Sheet

### Section 1: Chemical Product and Company Identification

**Product Name:** BOSS Automatic Transmission Fluid

**Product Use:** For lubrication of automatic and power-shift transmissions. If this product is used in combination with other products, refer to the Material Safety Data Sheet for those products.

**Synonyms:** Petroleum oil; Lube oil; Petroleum hydrocarbon; Lubricant.

**Boss Lubricants**

112, 6303 30 St. SE

Calgary, AB

T2C 1R4

**Issue Date:** March 18, 2015

**Supersedes Issue Date:** January 1, 2012

**Emergency Phone Number(s)**

**Business:** (800) 844-9457

**Fax #:** (403) 279-2272

### Section 2: Hazardous Identification

**EMERGENCY OVERVIEW Appearance**

Red liquid, petroleum odor.

**Signal Word** CAUTION!

**Health Hazards**

May be harmful if swallowed.

May irritate eyes and skin.

**POTENTIAL HEALTH EFFECTS**

**Inhalation:** This product is not likely to present an inhalation hazard at normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs).

**Eyes:** May cause irritation.

**Skin:** May cause irritation. Not likely to be absorbed through the skin in harmful amounts. Prolonged contact with this product may cause allergic skin sensitization reactions.

**Ingestion:** May be harmful if swallowed. May cause throat irritation, nausea, vomiting and diarrhea. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

**Medical Conditions Aggravated by Exposure:** Individuals with pre-existing respiratory tract (nose, throat, and lungs), eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

**Chronic:** Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis).

**Cancer Information:** No known carcinogenicity. For more information, see **SECTION 11: CARCINOGENICITY**. Also see **SECTION 15: CALIFORNIA**.

**Environmental Hazards:** Not available. Also see **SECTION 12: ECOLOGICAL INFORMATION**.



### Section 3: Composition / Information on Ingredients

CAS	Component	Percent
64742-58-1	Lubricating oils, petroleum, hydrotreated spent	57.5-92.5
Mixture	Mixture of severely hydrotreated and hydrocracked base oil (petroleum)	0-30*
Not Available	Substituted alkyl phosphite**** (Canadian Reg #5624)	0.1-1.0

#### Component Related Regulatory Information

\*Mixture includes the following CAS numbers 8042-47-5, 64742-46-7, 64742-52-5, 64742-54-7, 72623-84-8, 72623-85-9, 72623-86-0, 72623-87-1, 178603-63-9, 178603-64-0, 178603-65-1, and 178603-66-2.

### Section 4: First Aid Measures

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

**Eyes:** If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

**Skin:** Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists. If product is injected under pressure into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, a physician should immediately evaluate the individual as a medical emergency. Wash contaminated clothing before reuse.

**Ingestion:** Do NOT induce vomiting. Immediately get medical attention. Call 1-800-468-1760 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

**Notes to Physicians:** Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

### Section 5: Fire Fighting Measures

**Hazardous Combustion Products:** Decomposition and combustion materials may be toxic. Burning may produce oxides of sulfur, phosphorus and nitrogen, hydrogen sulfide, alkyl mercaptans, sulfides, aldehydes, carbon dioxide, carbon monoxide and other unidentified organic compounds.

**Conditions of Flammability:** Sparks or flame. Products may burn, but do not ignite readily.

**Extinguishing Media:** Carbon dioxide, regular foam, dry chemical, water spray, or water fog. Water or foam may cause frothing.

**Fire Fighting Equipment/Instructions:** A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

**NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**Fire and Explosion Hazards:** Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Product is not sensitive to mechanical impact or static discharge.



## Section 6: Accidental Release Measures

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain spill as a liquid for possible recovery, or absorb with compatible sorbent material and shovel with a clean tool into a sealable container for disposal. Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

## Section 7: Handling and Storage

### Handling Procedures

Keep away from sparks or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. When large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. This product has a low vapor pressure and is not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes.

### Shipping and Storing

Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.

## Section 8 : Exposure Controls / Personal Protection

### Exposure Guidelines

**Component Exposure Limits:** Non available.

**Engineering Controls:** Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits.

### Personal Protective Equipment

**Respiratory:** No respiratory protection normally required. Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

**Eyes/Face:** Where eye contact is likely, wear safety glasses.

**Skin:** Where skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended. To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, coveralls, long sleeve shirts, or other protective clothing.

**Personal Hygiene:** Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard affected clothing, shoes, and/or protective equipment if they cannot be thoroughly cleaned. Discard leather articles, such as shoes, saturated with these products.

**Other Personal Protective Equipment:** Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

### Section 9: Physical & Chemical Properties

<b>Appearance/Odor:</b>	Red liquid, petroleum odor	<b>Boiling Point:</b>	475°F (246°C) (minimum)
<b>pH:</b>	Not applicable	<b>Melting Point:</b>	Not available [pour point -44°F (-42°C) (maximum)]
<b>Solubility (H2O):</b>	Insoluble	<b>Specific Gravity:</b>	0.86 (water = 1) (approximately)
<b>Density:</b>	7.2 LB/US gal (860 g/l) (approximately)	<b>Octanol/H2O Coeff.:</b>	Not available
<b>Evaporation Rate:</b>	Not available	<b>Molecular Weight:</b>	Not applicable
<b>Odor Threshold:</b>	Not available	<b>Auto Ignition:</b>	Not available
<b>LFL:</b>	Not available	<b>Flash Point:</b>	352°F (178°C) Cleveland Open Cup
<b>UFL:</b>	Not available	<b>Viscosity:</b>	Greater than 100SUS
<b>Vapor Pressure:</b>	Less than 0.1 mmHg at 68°F (20°C)	<b>Freezing Point:</b>	Not available

### Section 10: Chemical Stability & Reactivity Information

<b>Stability:</b>	Stable under normal temperatures and pressures.
<b>Incompatibility:</b>	Avoid acids, alkalis, oxidizing agents, reducing agents, halogens and halogenated compounds. Avoid sparks and flame.
<b>Reactivity:</b>	Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.
<b>Hazardous Decomposition Products:</b>	None under normal temperatures and pressures. See also <b>SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.</b>
<b>Conditions to Avoid:</b>	Avoid heat, sparks, or flame when not in use.

### Section 11: Toxicological Information

#### Component Analysis - LD50/LC50

##### Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

Oral LD50 Rat >2000 mg/kg; Dermal LD50 Rat >2000 mg/kg; Dermal LD50 Rabbit >4480 mg/kg

##### Mixture of severely hydrotreated and hydrocracked base oil (petroleum) (Mixture)

Inhalation LC50 Rat 4.6 mg/L 4 h; Oral LD50 Rat 7400 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

#### Acute Effects

May be harmful if swallowed. May irritate eyes and skin. May cause throat irritation, nausea, vomiting, and diarrhea. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

#### Component Carcinogenicity

##### Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

**ACGIH:** A4 - Not Classifiable as a Human Carcinogen (highly & severely refined); A2 - Suspected Human Carcinogen (poorly & mildly refined, related to Oil mist, mineral)

##### Mixture of severely hydrotreated and hydrocracked base oil (petroleum) (Mixture)

**ACGIH:** A4 - Not Classifiable as a Human Carcinogen (highly & severely refined); A2 - Suspected Human Carcinogen (poorly & mildly refined, related to Oil mist, mineral)

<b>Sensitization:</b>	Prolonged contact with this product may cause allergic skin reactions.
<b>Mutagenicity:</b>	Experimental evidence suggests that this product does not cause mutagenesis.
<b>Reproductive Toxicity:</b>	Based on best current information, there is no known reproductive toxicity associated with this product.
<b>Teratogenicity:</b>	Based on best current information, there is no known teratogenicity associated with this product.

## Section 12: Ecological Information

**Ecotoxicity:** Based upon component, product is expected to harmful to aquatic life.

### Component Analysis - Ecotoxicity - Aquatic Toxicity

#### Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Brachydanio rerio	79.6 mg/L [semi-static]	
96 Hr LC50 Pimephales promelas	3.2 mg/L [semi-static]	

#### Mixture of severely hydrotreated and hydrocracked base oil (petroleum) (Mixture)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	35 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	>10000 mg/L [static]	

**Persistence/Degradability:** May cause long-term adverse effects in the aquatic environment.

**Bioaccumulation/Accumulation:** No data available for this product.

**Mobility in Environmental Media:** No additional information available.

**Other Adverse Effects:** No additional information available.

## Section 13: Disposal Considerations

**Disposal Instructions:** Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact BOSS Lubricants regarding proper recycling or disposal.

**US EPA Waste Number & Descriptions:** This product if discarded, is not expected to be a characteristic or listed hazardous waste. If recycled in the USA, this product can be managed in accordance with the used oil exemption under 40 CFR Part 279. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

## Section 14: Transportation Information

**Emergency Response Guide Number:** Not applicable.

**DOT Shipping Name:** Not regulated as a hazardous material.

**TDG Shipping Name:** Not regulated as a dangerous good.

**IATA Information:** No Classification Assigned.

**IMDG Information:** No Classification Assigned.

## Section 15: Regulatory Information

### VOC (As Regulated)

Negligible; As per 40 CFR Part 51.100(s)

**SARA Sections 311/312:** These products pose the following health hazards as defined in 40 CFR Part 370 and are subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA): Immediate (Acute) Health Hazard

### SARA 302/304

**Component Analysis:** This product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.



**SARA Section 313:** This product does not contain "toxic" chemical(s) subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

**Component Analysis:** This product does not contain any "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

**CERCLA**

**Component Analysis:** Based on the ingredients list in SECTION 3, this product does not contain any "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

**TSCA:** All the components of this product are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.

**Component Analysis**

Component	CAS #	TSCA
Lubricating oils, petroleum, hydrotreated spent	64742-58-1	Yes
Mixture of severely hydrotreated and hydrocracked base oil (petroleum)	Mixture	Yes
	Proprietary	No
	Proprietary	Yes
	Proprietary	Yes
	Proprietary	Yes
	63148-62-9	Yes

**State Regulations**

**U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	MA	MN	NJ	PA	CA
Lubricating oils, petroleum, hydrotreated spent (related to: Oil mist, mineral)	64742-58-1	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>
	Mixture	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>

**California:** This product does not contain any chemical known to the State of California to cause cancer.

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

**Canadian Regulations:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR. This product contains a proprietary component (substituted alkyl phosphite) that is registered with Canada (registration number is 5624).

**Component Analysis**

Component	CAS #	CAN
Lubricating oils, petroleum, hydrotreated spent	64742-58-1	DSL
	Mixture	DSL
	Proprietary	No
	Proprietary	DSL
	Proprietary	DSL
	Proprietary	DSL
	63148-62-9	DSL





**Canadian WHMIS Information:** Not Regulated.

**Canadian Environmental Protection Act (CEPA):** All the components of this product are listed on, or are automatically included as "substance occurring in nature" on, or are exempted from the requirements to be listed on, the Canadian Domestic Substances List (DSL).

## Section 16: Other Information

**Label/Other Information:** Not available.

**Revision Information:** Reformatted; modified to exclude information pertaining to oil mist; updated address.

### Disclaimer

User assumes all risks incident to the use of this (these) product(s). To the best of our knowledge, the information contained herein is accurate. However, BOSS Lubricants assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the product(s) as supplied to the user.