Image Notes SAFETY DATA SHEET Issuing Date 22-Oct-2019 Revision date 22-Oct-2022 Revision Number 1 I. PRODUCT AND COMPANY IDENTIFICATION BOSS HP 5000 AUTOMOTIVE ENGINE OILS Includes Grades 5W-20, 5W-30, 10W-30 Other means of Identification Froduct Code GHSRBS-100 GHSRBS-100 Synonyms: Synthetic blend petroleum oil; Lube oil; Petroleum hydrocarbon; Lubricant.			
Product NameBOSS HP 5000 AUTOMOTIVE ENGINE OILSIncludes Grades5W-20, 5W-30, 10W-30Other means of IdentificationFroduct CodeOther Means Of IdentificationGHSRBS-100			
Includes Grades5W-20, 5W-30, 10W-30Other means of IdentificationFroduct CodeOther MeansGHSRBS-100			
Other means of Identification Product Code GHSRBS-100			
Product Code GHSRBS-100			
Synonyms: Synthetic blend petroleum oil; Lube oil; Petroleum hydrocarbon; Lubricant.			
Recommended use of the chemical and restrictions on use			
Recommended useFor lubricating passenger car motors. If these products are used in combination with othe products, refer to the Material Safety Data Sheet for those products.			
Restrictions on use No information available			
Details of the supplier of the safety data sheet			
Initial supplier identifier Manufacturer Address			
BOSS Lubricants 112, 6303 30 Street SE Calgary, AB T2C 1R4			
Emergency Phone Number(s)			
Initial supplier phone number (800) 844-9457			
Emergency TelephoneChemtrec 1-800-424-9300			

2. HAZARDS IDENTIFICATION

Classification

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS) Not a hazardous substance or mixture according to Canada's Hazardous Product Regulations.

GHS LABEL ELEMENTS

Symbol(s)	None needed according to classification criteria.
Signal Word	None needed according to classification criteria.
Hazard Statement(s)	None needed according to classification criteria.
Precautionary Statement(s)	
Prevention	None needed according to classification criteria.
Response	None needed according to classification criteria.





Storage	None needed according to classification criteria.
Disposal	Dispose of in accordance with all applicable federal, Provincial and local regulations
Hazard(s) Not Otherwise Classified	Repeated exposure may cause skin dryness or cracking.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Component	Percent
64742-58-1	Lubricating oils, petroleum, hydrotreated spent	80-85
178603-65-1	Gas oils, petroleum, vacuum, hydrocracked, hydro-isomerized, hydrogenated, C20-40, branched and cyclic, high viscosity index	0-5
8042-47-5	Mineral Oil	0-15
68649-42-3	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	0-2

4. FIRST AID MEASURES

Inhalation	Remove person to fresh air and keep comfortable for breathing. Get medical attention if needed.		
Eyes	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical attention if needed.		
Skin	Wash with plenty of soap and water. Get medical attention if needed.		
Ingestion	Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.		
Important Symptoms/Effects			
Acute	No information on significant adverse effects.		
Delayed	No information on significant adverse effects.		
Indication of any immediate medical attention and special treatment needed			
Note to Physicians	Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-844-9457 for additional information		

5. FIRE FIGHTING MEASURES		
Suitable Extinguishing Media	Carbon dioxide, regular foam, dry chemical, water spray, or water fog. Water or foam may cause frothing.	
Unsuitable Extinguishing Media	None known.	
Specific Hazards Arising from the Chemical	Negligible fire hazard. "Empty" containers may retain residue and can be dangerous. Product is not sensitive to mechanical impact or static discharge.	





Hazardous Combustion Products	Decomposition and combustion materials may be toxic. Burning may produce aldehydes, hydrogen sulfide, alkyl mercaptans, sulfides, carbon monoxide, and oxides of sulfur, calcium and zinc and other unidentified organic compounds.			
Conditions of Flammability	Sparks, or flame. Product may burn but does not ignite readily.			
Protective Equipment for Firefighters	A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.			
Fire Fighting Instructions:	Keep storage containers cool with water spray.			
NFPA Ratings: Health: 1	Fire: 1	Reactivity: 0		
Hazard Scale: 0 = Minimal	1 = Slight	2 = Moderate	3 = Serious	4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:			
Personal Precautions	Wear personal protective clothing and equipment, see Section 8.		
Methods and Materials for Containment and Clean Up:			
Methods for Containment	Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain spill away from surface water and sewers. Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.		
Methods for Clean Up	Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and		
	shovel with a clean, spark proof tool into a sealable container for disposal.		

7. HANDLING AND STORAGE

Precautions for Safe Handling	Keep away from sparks and flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. When transferring 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.





Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions	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 flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.
Incompatibilities	Strong oxidizing materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component Exposure Limits	Canada, OSHA, NIOSH, and ACGIH have not developed exposure limits for any of this product's components.
Engineering Controls	Provide general ventilation. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls.
Individual Protection Measures	, such as Personal Protective Equipment
Eye/face protection	Wear safety glasses. Additional protection like goggles, face shields, or respirators may be needed dependent upon anticipated use and concentrations of mists or vapors. Eye wash fountain and emergency showers are recommended. Contact lens use is not recommended.
Respiratory Protection	A respiratory protection program which meets USA's OSHA General Industry Standard 29 CFR 1910.134 or Canada's CSA Standard Z94.4-M1982 requirements must be followed whenever workplace conditions warrant a respirator's use. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.
Glove Recommendations	Where skin contact is likely, wear chemical impervious protective gloves; use of natural rubber or equivalent gloves is not recommended. When products are heated and skin contact is likely, wear heat-resistant gloves, boots, and other protective clothing. To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant face shield, boots, apron, coveralls, long sleeve shirts, or other protective clothing.
Protective Materials	Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: Safety glasses, gloves, and lab coat or apron.





9. PHYSICAL AND CHEMICAL PROPERTIES

Information of basic physical and chemical properties

information of basic physical and chemic	ai properties	
Physical State	Liquid	
Appearance	Amber	
Colour	Amber	
Odor	Petroleum Distillates	
Odor Threshold	No Information available	
<u>Property</u>	<u>Values</u>	Remarks • Method
рН	No Data Available	None Known
Melting point/Freezing Point	No Data Available	None Known
Boiling Point / Boiling Range	246ºC (475ºF) (minimum)	ASTM D7213
Flash Point:	218°C - 234°C	ASTM D92
Evaporation Rate:	No Data Available	None Known
Flammability (solid, gas)	No Data Available	None Known
FLAMMABLE LIMITS IN AIR		
Upper flammability or explosive limits	No Data Available	
Lower flammability or explosive limits	No Data Available	
Vapor Pressure	less than 0.1 mmHg at 20ºC (68ºF)	
Vapor Density	No Data Available	None Known
Relative Gravity:	863-872	D4052
Water Solubility	Insoluble in water	None Known
Solubility in other solvents	No Data Available	None Known
Partition coefficient	No Data Available	None Known
Autoignition Temperature:	No Data Available	None Known
Decomposition temperature	No Data Available	None Known
Kinematic viscosity	49.7-69.5 cST @ 40°C	ASTM D445
Dynamic viscosity	No Data Available	None Known
Pour Point:	-18ºC (0ºF) (maximum)	
Other information		
Explosive properties	No Data Available	
Oxidizing properties	No Data Available	
Softening point	No Data Available	
Molecular weight	No Data Available	
VOC Content (%)	No Data Available	
Liquid Density	No Data Available	
· ·		

10. STABILITY AND REACTIVITY

Stability	Stable under normal temperatures and pressures.	
Conditions to Avoid	Avoid sparks or flame when not in use.	
Incompatibility	Avoid oxidizing agents, acids and reactive halogens.	
Reactivity	Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.	





Hazardous Decomposition Products:

None under normal temperatures and pressures. See also Section 5:

HAZARDOUS COMBUSTION PRODUCTS.

11. TOXICOLOGICAL INFORMATION				
Information on Likely F	Information on Likely Routes of Exposure			
Inhalation	No information on significant adverse effects.			
Skin Contact	Prolonged or repeated exposure may cause skin dryness or cracking.			
Eye Contact	No information on significant adverse effects.			
Ingestion	May be harmful if swallowed. Acute and Chronic Toxicity			
TOXICITY DATA				
Component Analysis - I	LD50/LC50			
The components of this	material have been reviewed in various sources and the following selected endpoints are published			
Lubricating oils, petrole	eum, hydrotreated spent (64741-88-4)			
Oral LD50	Rat >2000 mg/kg			
Dermal LD50	Rat >2000 mg/kg			
Dermal LD50	Rabbit >4480 mg/kg			
Residual oils, petroleur	n, solvent-refined (64742-01-4)			
Inhalation LC50	Rat: 2.18 mg/L/4H			
Oral LD50	Rat:>5000 mg/kg			
Dermal LD50	Rabbit:>2000 mg/kg			
Lubricating oils (petroleum), C>25, hydrotreated bright stock (72623-83-7)				
Oral LD50	Rat:>5000 mg/kg			
Residual oils (petroleur	m), solvent dewaxed (64742-62-7)			
Oral LD50	Rat >5000 mg/kg;			
Dermal LD50	Rabbit >2000 mg/kg;			
Inhalation LC50	Rat 2.18 mg/L 4 h			
Lubricating oils, petrole	eum, hydrotreated spent (64742-58-1)			
Oral LD50	Rat >2000 mg/kg;			
Dermal LD50	Rabbit >4480 mg/kg			
Lubricating oils, petrole	Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based (72623-87-1)			
Oral LD50	Rat >5000 mg/kg;			
Dermal LD50	Rabbit >2000 mg/kg;			
Inhalation LC50	Rat 2.18 mg/L 4 h			
Petroleum distillates, hydrotreated heavy naphthenic (64742-52-5)				
Oral LD50	Rat >5000 mg/kg;			
Dermal LD50	Rabbit >2000 mg/kg			
Product Toxicity Data				

Acute Toxicity Estimate

Dermal > 2000 mg/kg

Oral > 2000 mg/kg





Immediate Effects	No information on significant adverse effects.	
Delayed Effects	No information on significant adverse effects.	
Irritation/Corrosivity Data	May cause slight skin and respiratory irritation.	
Respiratory Sensitization	No information on significant adverse effects.	
Dermal Sensitization	No information for the product.	
Component Carcinogenicity	None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA	
Germ Cell Mutagenicity	No information available for the product.	
Tumorigenic Data	No information available for the product.	
Reproductive Toxicity	No data available for this product.	
Specific Target Organ Toxicity		
Single Exposure	No information on significant adverse effects.	
Repeated Exposure	No target organs identified.	
Aspiration hazard	No data available.	
Medical Conditions	Aggravated by Exposure Individuals with pre-existing respiratory tract (nose, throat, ar lungs), eye, and/or skin disorders may have increased susceptibility to the effects of exposure.	

12. ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Petroleum distillates, solvent-refined heavy paraffinic (64741-88-4)

Species	Test & Results		
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L		
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID		

Residual oils, petroleum, solvent-refined (64742-01-4)

Species	Test & Results	
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L	
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID	

Residual oils (petroleum), solvent dewaxed (64742-62-7)

Species	Test & Results		
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L		
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID		

Lubricating oils, petroleum, C>25. hydrotreated bright stock (72623-83-7)





Species	Test & Results
Fish:	LC50 96 h Lepomis macrochirus >10000 mg/L
Lubricating oils, petroleum, hydrotreated	spent 64742-58-1
Species	Test & Results
Fish:	LC50 96 h Brachydanio rerio 79.6 mg/L [semi-static];
	LC50 96 h Pimephales promelas 3.2 mg/L [semi-static]
Lubricating oils, petroleum, C20-50, hydro	otreated neutral oil-based (72623-87-1)
Species	Test & Results
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
Petroleum distillates, hydrotreated heavy naphthenic (64742-52-5)	
Species	Test & Results
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
Phosphorodithioic acid, O,O-di-C1-14-alk	yl esters, zinc salts (68649-42-3)
Species	Test & Results
Fish:	LC50 96 h Pimephales promelas 1 - 5 mg/L [static];
	LC50 96 h Pimephales promelas 10 - 35 mg/L [semi-static]
Invertebrate:	EC50 48 h Daphnia magna 1 - 1.5 mg/L IUCLID
Persistence/Degradability	No information available.
Bioaccumulation/ Accumulation	No information available.
Mobility in Environmental Media	No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents/container in accordance with

local/regional/national/international regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. This product, if discarded, is not expected to be a characteristic or listed hazardous waste. If recycled in the USA, it 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.





14. TRANSPORT INFORMATION

Basic Description:	Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO).		
DOT			
Proper Shipping Name:	Not regulated for transport.		
UN Number:	Not regulated for transport.		
Hazard Class:	Not regulated for transport.		
Packing Group:	Not regulated for transport.		
<u>TDG</u>			
Proper Shipping Name:	Not regulated for transport.		
UN Number:	Not regulated for transport.		
Hazard Class:	Not regulated for transport.		
Packing Group:	Not regulated for transport.		
IMDG			
Proper Shipping Name:	Not regulated for transport.		
UN Number:	Not regulated for transport.		
Hazard Class:	Not regulated for transport.		
Packing Group:	Not regulated for transport.		
Marine Pollutant:	Not regulated for transport.		
IATA			
Proper Shipping Name:	Not regulated for transport.		
UN Number:	Not regulated for transport.		
Hazard Class:	Not regulated for transport.		
Packing Group:	Not regulated for transport.		

International Bulk Chemical Code: This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk

15. REGULATORY INFORMATION

Volatile Organic Compo	unds (As Regulated):	Negligible; As per 40 CFR Part 51.100(s)
Federal Regulations		
<u>SARA 302/304</u>		
Component Analysis: Based on the ingredient(s) listed in SECTION 3, 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 311/312 Hazardou	ıs Categories	
Acute Health: Chronic Health:	Yes Yes	





Fire:	No
Reactive:	No
SARA Section 313	
Component Analysis:	This product contains a "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.
Phosphorodithi	oic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)
	1.0 % of minimal concentration (related to Zinc compounds)
<u>CERCLA</u>	
Component Analysis:	Based on the ingredient(s) listed 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.
U.S. State Regulations:	None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA. No component(s) are listed under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).
International Inventories	<u>8</u>
TSCA	Complies.
DSL/NDSL	Complies.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.

16. OTHE	ER INFORMATION				
<u>NFPA</u>	Health hazards 0	Flammability	1	Instability 0	Physical and chemical properties -
<u>HMIS</u>	Health hazards 0	Flammability	1	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)





Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set RTECS (Registry of Toxic Effects of Chemical Substances) World Health Organization

Issuing Date	Oct 22, 2019
Revision date	Sept 1, 2016
	N. 1 C

No information available.

Revision Note

<u>Disclaimer</u>

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Data	for	Regu	latorv	Rules
Data				i.u.co

Region	Template name	Revision Note
Canada	HGHS	2.0

GHS Product Information		
Physical state	Liquid	
Flash point °C	218 - 234	
Boiling point / boiling range °C	246	





Component Information

Canada

	GHS
Classification	
Not Hazardous	Not a hazardous substance or mixture according to the Globally Harmonized System (GHS) Not a hazardous substance or mixture according to Canada's Hazardous Product Regulations.
Signal word	None
Precautionary Statements - Disposal	Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable



