SAFETY DATA SHEET

Issuing Date 02-Feb-2022 **Revision date** 02-fev-2022 **Revision Number** 2

1. IDENTIFICATION

Product Identifier

Product Name BOSS Synthetic Blend Diesel Engine Oil 0W40, 5W40, 10W40, 15W40

Other means of identification Synthetic Blend Diesel Engine Oil

Product Codes GHSRBS-129

Synonyms No data available

Recommended use and restrictions on use

Recommended use Motor Oil

Restrictions on use No data available

Details of the supplier of the safety data sheet

Initial supplier identifier

BOSS Lubricants

Manufacturer Address

6303 30 ST SE Calgary, AB T2C 1R4

Emergency telephone number

Initial supplier phone number **(**800) 844-9457

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

GHS 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.

Label elements

None

Hazard statements

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.

Precautionary Statements –

Disposal Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other information Repeated exposure may cause skin dryness or cracking.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	**Concentration**	Hazardous Material :t Information Review A A registry number (HMI registry #)	Date HMIRA filed and date exemption granted (if applicable)

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	5 - 10	-	NA
Solvent-refined light paraffinic distillate	64741-89-5	1 - 5	-	NA
Petroleum distillates, solventrefined heavy paraffinic	64741-88-4	1 - 5	-	NA
Solvent dewaxed light paraffinic distillate (petroleum)	64742-56-9	1 - 5	-	NA

4. FIRST AID MEASURES

Description of first aid measures

Inhalation Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen.

Eye contact Use eye wash to remove a chemical from the eye. Flush the affected eye for at least fifteen minutes. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Seek medical attention if irritation persists.

Skin Contact Wash with soap and water. Get medical attention if irritation develops or persists.

Ingestion Minimal risk of harm if swallowed. Do not induce vomiting. Seek medical attention immediately. Provide medical care provider with this SDS.

Most important symptoms and effects

Acute or Delayed Prolonged contact may cause redness and irritation.

An indication of immediate medical attention and special treatment needed, if necessary

Notes to physician No additional first aid information available.

5. FIRE - FIGHTING MEASURES

Suitable extinguishing media Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires.

Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a stream of water into the hot burning liquid.

Unsuitable extinguishing media Do not use water in a jet.

Specific hazards arising from the Chemical Hazardous combustion products may include:

A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide may be evolved if incomplete combustion occurs. Unidentified organic and inorganic compounds.

Specific extinguishing methods Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment and precautions for firefighters Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained

Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469)

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions — No health affects expected from the clean up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this SDS.

Methods and materials for containment and cleaning up

Methods for Containment — Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Dike with suitable absorbent material like granulated clay.

Methods for cleaning up — Cover liquid spill with sand, earth or other non-combustible absorbent material. Prevent product from entering drains.

Environmental precautions — Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling — Avoid breathing dust/fume/gas/mist/vapors/spray. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark proof tools and explosion-proof equipment. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Conditions for safe storage — Store in a cool dry place. Isolate from incompatible materials.

Packaging material — Suitable material: For containers or container linings, use mild steel or high-density polyethylene.

Container Advice — Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

Materials to Avoid/Chemical Incompatibility — Strong oxidizing agents

8. EXPOSURE CONTROL - PERSONAL PROTECTION

Control parameters, including occupational exposure limit values or biological limit values and the source of those values

Chemical Name	Occupational Exposure Limits	Value
Oil mist, mineral	OSHA PEL	5 mg/m3
Oil mist, mineral	OSHA PEL	5 mg/m3
Lubricating oils (petroleum),	OSHA PEL	5 mg/m3
C20-50, hydrotreated neutral oil-based Distillates (petroleum), solvent-dewaxed light paraffinic	OSHA PEL	5 mg/m3

Oil mist, mineral	OSHA PEL	5 mg/m3
Oil mist, mineral	OSHA PEL	5 mg/m3
None.	OSHA STEL	
Oil mist, mineral	ACGIH TLV-TWA	5 mg/m3
Oil mist, mineral	ACGIH TLV-TWA	5 mg/m3
Lubricating oils (petroleum), C20-50, hydrotreated neutral oilbased	ACGIH TLV-TWA	5 mg/m3
Distillates (petroleum), solvent-dewaxed light paraffinic	ACGIH TLV-TWA	5 mg/m3
Oil mist, mineral	ACGIH TLV-TWA	5 mg/m3
Oil mist, mineral	ACGIH TLV-TWA	5 mg/m3
Oil mist, mineral	ACGIH STEL	10 mg/m3
Oil mist, mineral	ACGIH STEL	10 mg/m3
Lubricating oils (petroleum), C20-50, hydrotreated neutral oilbased	ACGIH STEL	10 mg/m3
Distillates (petroleum), solvent-dewaxed light paraffinic	ACGIH STEL	10 mg/m3
Oil mist, mineral	ACGIH STEL	10 mg/m3
Oil mist, mineral	ACGIH STEL	10 mg/m3
None.	IDLH	
None.	OSHA PEL-Skin Notation	

Appropriate engineering controls Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort.

Personal protective equipment

Respiratory Protection Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.

Respirator Type(s) None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

Eye and face protection Wear safety glasses when handling this product if there is a likelihood of contact with eyes.

Skin Protection Where use can result in skin contact, practice good personal hygiene and wear impervious gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Hand protection

Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous
Color	Amber
Odor	Petroleum distillates
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	188 - 238 °C	ASTM D93
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	<0.1 mmHg @ 20ºC	None known
Vapor density	No data available	None known
Relative density	0.846-0.881 @15°C	ASTM D1298
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	56.98 - 115 Cst @ 40ºC	D445
Dynamic viscosity	No data available	None known

Other information

Explosive properties	No information available.
Oxidizing properties	No information available.
Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity	There are no known reactivity hazards associated with this product.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None expected under standard conditions of storage.
Conditions to avoid, including static discharge, shock or vibration	Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition. Moisture (will lead to product performance degradation).
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	No decomposition if stored and applied as directed.

11. TOXICOLOGY INFORMATION

Information on toxicological effects

Ingestion Toxicity	Although this product has a low order of acute oral toxicity, aspiration of minute amounts into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death. Likely to be practically non-toxic by ingestion based on animal data.
Skin Contact	This material is likely to be slightly irritating to skin based on animal data. Can cause minor skin irritation, defatting, and dermatitis.
Absorption	Likely to be practically non-toxic based on animal data.
Inhalation Toxicity	No hazard in normal industrial use. Likely to be practically non-toxic based on animal data.
Eye Contact	This material is estimated to be non-irritating eyes (Draize score <15 [rabbits]). No hazard in normal industrial use.
Sensitization	Non-hazardous under Respiratory Sensitization category.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.
Carcinogenicity	Not expected to cause cancer. This product meets the IP-346 criteria of <3% PAH's and is not considered a carcinogen by the International Agency for Research on Cancer.
Reproductive and Developmental Toxicity	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.
Skin Absorption	Upon prolonged or repeated exposure, no hazard in normal industrial use.

Specific Target Organ Toxicity

Single Exposure	No information on significant adverse effects.
Repeated Exposure	No information on significant adverse effects.
Aspiration hazard	Based on available data, the classification criteria are not met.
Numerical measures of toxicity, including ATEs	Based on available data, the classification criteria are not met.

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.

12. ECOLOGICAL INFORMATION

Toxicity

Acute Aquatic Ecotoxicity	Non-hazardous under Aquatic Acute Environment category.
Chronic Aquatic Ecotoxicity	Non-hazardous under Aquatic Chronic Environment category.
Persistence and degradability	Biodegrades slowly.
Bioaccumulative potential	Bioconcentration may occur.
Mobility in soil	This material is expected to have essentially no mobility in soil. It absorbs strongly to most soil types.
Results of PBT and vPvB assessment	No data available.
Other adverse effects	Not determined

13. DISPOSAL CONSIDERATION

Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. TRANSPORTATION

Transport Canada	Not regulated
TDG	Not regulated
DOT	Not regulated

15. REGULATORY INFORMATION

Safety, health, and environmental regulations/legislation specific for the substance or mixture **International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer	Not applicable
The Stockholm Convention on Persistent Organic Pollutants	Not applicable
The Rotterdam Convention	Not applicable

International Inventories

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.

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

16. OTHER INFORMATION

NFPA	**Health hazards** 0	**Flammability** 1	**Instability** 0	**Physical and chemical properties** -
HMIS	**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

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Revision Note	No information available.

Disclaimer

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 Regulatory Rules

Region	Template name	Revision Note
Canada	HGHS	2.0

GHS Product Information

Physical state	Liquid
Flash point °C	237-226

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