



SAFETY DATA SHEET

Issuing Date 8-Nov-21

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Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Material Name Boss Synthetic GL-5 Gear Oils
75w-90/75w-140/80w-140

Other means of identification

Product Code(s) GHSRBS-128

Product use Gear Oil

Recommended use of the chemical and restrictions on use

Recommended use Lubricant

Restrictions on use No information available

Details of the supplier of the safety data sheet

<u>Initial supplier identifier</u>	<u>Manufacturer Address</u>
BOSS Lubricants	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

Classification in accordance with Schedule 1 of Canada's Hazardous Products Regulations (HPR) (SOR/2015-17) and paragraph (d) of 29 CFR 1910.1200 in the United States None needed according to classification criteria

Label Elements No classified hazards

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Highly Hydrotreated Paraffinic base oils	64742-54-7, 64742-55-8	70-99	-	
PAO Synthetic Base Oils	68037-01-04, 68037-01-04, 68649-12-7, 163149-29-9, 151006-63-2, 151006-62-1, 151006-60-9	70-99	-	
Ester Synthetic Base Oils	27178-16-1, 16958-92-2	70-99	-	
Phosphoric Acid Esters, Amine Salt	91745-46-9	1-5	-	

Olefin Sulfide	68937-96-2	1-5	-	
Polualkylmethacryate (PMA) Viscosity Modifier	9011-14-7	<5	-	
Poly Methyl Methacrylate Ester	8012-95-1	<1	-	

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Inhalation	This material has a low vapor pressure and is not expected to present an inhalation exposure at ambient conditions. If vapor or mist is generated when the material is heated, and the victim experiences signs of respiratory tract irritation, remove to fresh air.
Eye contact	No specific first aide measures are required. In case of contact, immediately flush eyes with large amounts of water and continue flushing until irritation subsides. If material is hot, treat for thermal burns and seek immediate medical attention. Remove contact lenses, if present and easy to do.
Skin	No specific first aid measures are required. In case of contact, no treatment is necessary under ordinary circumstances. Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If material is hot, submerge injured area in cold water. If victim is severely burned, remove to a hospital immediately.
Ingestion	No treatment is necessary under ordinary circumstances. Do not induce vomiting. This material does not present any known ingestion hazard.

Most important symptoms and effects, both acute and delayed

Dry skin and possible irritation with repeated or prolonged exposure. Inhalation of oil mists or vapors generated at elevated temperatures may cause respiratory irritation. Accidental ingestion can result in minor irritation of the digestive tract, nausea, and diarrhea.

Note to physicians	Acute aspirations of large amounts of oil-laden material may produce serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.
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5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Use dry chemical, foam, water spray or fog, or carbon dioxide CO2 to extinguish flames
Protection of fire-fighters	Fire fighting instructions: This material will burn although it is not easily ignited. See section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
Combustion products	Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Protective measures	Eliminate all sources of ignition in vicinity of spilled material.
Accidental Release Measures	Stop the source of the leak or release. Clean up releases as soon as possible, observing precautions in Exposure Controls/ Personal Protection. Contain liquid to prevent further contamination of soil, surface water, or ground water. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions and regulations may influence or limit the choice of appropriate actions to be taken.
Reporting	Follow prescribed procedures for reporting and responding to larger releases. Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

7. HANDLING AND STORAGE

Precautions Measures	Do not get in eyes, on skin, or on clothing. Keep out of the reach of children. Wash thoroughly after handling.
General handling information	Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.
Static Hazard	Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and combustible liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising out of static, lightning, and stray currents'.
Conditions for safe storage	Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated area away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material. Protect container(s) against physical damage.
Container warnings	Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. "Empty" containers retain residue and may 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. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum re-conditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANDI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Limits Mineral oil, as a mist, is regulated by Provincial authorities and range from 0.2 mg/m (British Columbia) to 5 mg/m³ (Alberta, Manitoba, Ontario, Quebec, Saskatchewan). Consult Provincial Occupational Health & Safety authority's websites for details.

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Avoid contact with eyes.

Hand protection Wear suitable gloves.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	
Appearance	Bright Amber	
Odor	Petroleum odor	
Odor threshold	No information available	
<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH	No data available	None known
Melting point/freezing point	No data available	None known
Initial Boiling point	599°F(315°C)	None known
Boiling point range	No data available	None known
Freezing point	No data available	None known
Evaporation Rate	<1	ASTM D972
Flash point	Min 302°F(150°C)	ASTM D92
Percentile volatile	Negligible	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability or explosive Limits	No data available	None known
Lower flammability or explosive Limits	No data available	None known
Vapor Pressure	<0.01 mmHg @ 100°C(212°F)	ASTM D323
Vapor Density	>1	None known
Density	No data available	None known
Volatility	No data available	None known
Relative Density (@ 15°C)	No data available	None known

Specific Gravity(water=1)	<1	ASTM D792
Solubility n-Octanol/ Water Partition coefficient	Soluble in hydrocarbons, insoluble in water	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Viscosity	6.0-30.5 cSt	ASTM 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	Stable.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents. Acids.
Hazardous decomposition products	Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Inhalation	No known hazard by inhalation.
Eye contact	Not expected to cause eye irritation.
Skin contact	No known hazard in contact with skin.
Ingestion	No known hazard by swallowing.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
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Acute toxicity

Numerical measures of toxicity	No information available
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Unknown acute toxicity	No information available
<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u>	
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Contains a known or suspected reproductive toxin. May cause harm to the unborn child.
STOT - single exposure	Based on available data, the classification criteria are not met.
STOT - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Not applicable.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Harmful to aquatic life with long lasting effects.
Persistence and degradability	No information available.
Bioaccumulation	No information available.
Other adverse effects	No information available.

13. DISPOSAL CONSIDERATIONS

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. TRANSPORT INFORMATION

<u>Transport Canada</u>	Not regulated
<u>TDG</u>	Not regulated
<u>DOT</u>	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

Internal 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 - Unites 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 - 302°F(150°C) min
 Boiling point / boiling range °C 599°F(315°C)

Component Information

Canada

GHS Classification

Hazard Statement	None
Signal word	None
Precautionary Statements - Disposal	Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

