SAFETY DATA SHEET

Issuing Date 02-Feb-2022 **Revision date** 02-Feb-2022 **Revision Number** 1

1. PRODUCT AND COMPANY IDENTIFICATION

Material Name Boss BXHD 10W, 30, 40, 50

Other means of identification

Product Code(s) GHSRBS-121

Synonyms None known

Recommended use Base Oil

Restrictions on use None known

Details of the supplier of the safety data sheet

Initial supplier identifier	**Manufacturer Address**
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

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 contents/container in accordance with local/regional/national/international regulations.

Other hazards Repeated exposure may cause skin dryness or cracking.

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)
Boss BXHD 10W, 30, 40, 50	64742-58-1	35-85	-	
Residual oils (petroleum), solvent dewaxed	64742-62-7	21 - 99	-	
Residual oils (petroleum), hydrotreated	64742-57-0	0 - 85	-	
Petroleum distillates, solvent-refined heavy paraffinic	64741-88-4	0 - 85	-	
Petroleum Distillate	NOT AVAILABLE	0.1 - 1	-	
Lubricating oils, petroleum, hydrotreated spent	64742-58-1	4.5 - 99	-	
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	0.1 - 1	-	
Lubricating oils (petroleum), C>25 hydro treated bright stock	72623-83-7	0 - 85	-	
Alkyl phenol	NOT AVAILABLE	0.1 - 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 Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention, if needed.

Eye contact If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin Wash with plenty of soap and water while removing all contaminated clothes and shoes. Get medical attention, if needed.

Ingestion Immediately call a poison center or doctor/physician

Most important symptoms and effects, both acute and delayed

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. 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.

Unsuitable Extinguishing Media Do not use high pressure water streams.

Specific hazards arising from the chemical Negligible fire hazard. Avoid friction, static electricity, and sparks.

Hazardous Combustion Products Decomposition and combustion materials may be toxic. Burning may product smoke, carbon dioxide, carbon monoxide, unidentified organic compounds, metal oxides, nitrogen oxides, hydrogen sulfide, sulfur oxides, oxides of phosphorus, and oxides of zinc.

Fire Fighting Measures Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Keep unnecessary people away, isolate hazard area and deny entry.

Special protective equipment for fire-fighters A positive-pressure, self-contained breathing apparatus (SCBA) and full body protective equipment is required for fire emergencies

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Personal precautions Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and material for containment and cleaning up

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. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. 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. Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later 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 products, 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 well-ventilate area. Avoid contact with eyes, skin, clothing, and shoes.

Conditions for safe storage, including any incompatibilities

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.

Incompatible Materials Oxidizing materials, acids

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

Appropriate 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.

Individual protection measures, such as personal protective equipment

Personal Protection 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 requirement should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: Safety glasses, gloves, lab coat, or apron.

Eye/Face Protection Safety glasses with side shields should be worn at a minimum. Additional protection such as goggles, face shields, or respirators may be needed depending upon anticipated use and concentrations of mists or vapors. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.

Skin Protection Where skin contact is likely, wear gloves impervious to product; use of natural rubber (latex) or equivalent gloves is not recommended. When product is heated and skin contact is likely, wear heat-resistant gloves, boots, and other protective clothing.

Respiratory Protection No respirator is required under normal conditions of use. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Color	Amber
Odor	Petroleum
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	475°F(246°C) (minimum)	ASTM D7213
Boiling point range	No data available	None known
Freezing point	No data available	None known
Evaporation Rate	0.1 (butyl acetate = 1)	None known
Flash point	421ºF (216ºC) (minimum)	ASTM D92
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	

Density	7.3 LB/US gal (880 g/l) (approx)	ASTM D4052
Vapor Pressure	Less than 0.1 mm Hg at 68ºF (20ºC)	ASTM D323
Vapor Density	No data available	None known
Relative Density (@ 15°C)	0.89	ASTM D6822
Specific Gravity(water=1)	0.88 (water = 1) (approx)	ASTM D792
Solubility	Insoluble	None known
n-Octanol/ Water Partition coefficient	No data available	None known
Pour point	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Viscosity	>20.5 mm²/s @ 104°F (40°C)	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	No reactivity hazard is expected
Chemical Stability	Stable under normal temperatures and pressures
Possibility of hazardous reactions	Will not polymerize
Conditions to avoid	Avoid sparks, flames, and other sources of ignition
Hazardous decomposition products	None under normal temperatures and pressures
Incompatible materials	Avoid oxidizing agents and acids

11. TOXICOLOGICAL INFORMATION

Toxicity Data and 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

Residual oils (petroleum), 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

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

Inhalation LC50	Rat 2.18 mg/L 4 h.
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

Lubricating oils, petroleum, C15-30, hydrotreated neutral oil-based (72623-86-0)

Inhalation LC50	Rat 2.18 mg/L 4 h.
Oral LD50	Rat >5000 mg/kg.
Dermal LD50	Rabbit >2000 mg/kg

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

Inhalation LC50	Rat 2.18 mg/L 4 h.
Oral LD50	Rat >5000 mg/kg;
Dermal LD50	Rabbit >2000 mg/kg

Phosphorodithioic acid, O, O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

Duration/Test/Species	**Concentration/Conditions/Notes**
96 Hr LC50 Pimephales promelas	1.0-5.0 mg/L [static]
96 Hr LC50 Pimephales promelas	10.0-35.0 mg/L [semi-static]

Information on likely routes of exposure

Inhalation	No information on significant adverse effects.
Eye contact	No information on significant adverse effects.
Skin contact	Prolonged or repeated skin contact may cause irritation
Ingestion	May be harmful if swallowed.
Irritation/Corrosivity	May cause slight skin and respiratory irritation
Immediate Effects	No information on significant adverse effects
Delayed Effects	No information on significant adverse effects
Respiratory Sensitization	No information available for the product
Skin Sensitization	No information available for the product
Dermal Sensitization	No information available for the product
Component Carcinogenicity	None of this product's components are listed by ACGIH, IARC, OSHA< NIOSH, or NTP
Germ cell mutagenicity	No information available for the product
Teratogenicity	No information available for the product
Tumorigenic Data	No information available for the product
Reproductive effects	No epidemiological data is available for this product
Aspiration hazard	No data available
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

Specific Target Organ Toxicity

Single Exposure	No information on significant adverse effects

Repeated Exposure No information on significant adverse effects

12. ECOLOGICAL INFORMATION

Ecotoxicity Harmful to aquatic life. Avoid release to the environment

Component Analysis-Aquatic Toxicity

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

Duration/Test/Species	Concentration/Conditions
96 Hr LC50 Brachydanio rerio	79.6 mg/L (semi-static)
96 Hr LC50 Pimphales promelas	3.2 mg/L (semi-static)

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

Duration/Test/Species	Concentration/Conditions
96 Hr LC50 Oncorhynchus mykiss	>5000 mg/L
48 Hr EC50 Daphnia magna	>1000 mg/L

Phosphorodithioic acid, O, O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

Duration/Test/Species	Concentration/Conditions
96 Hr LC50 Pimephales promelas	1.0-5.0 mg/L (static)
96 Hr LC50 Pimephales promelas	10.0-35.0 mg/L (semi-static)
48 Hr EC50 Daphnia magna	1-1.5 mg/L

Persistence and degradability No information available for the product

Bioaccumulation Potential No information available for the product

Mobility in soil No information available for the product

Other adverse effect No information available for the product

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

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

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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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 -	279°C (534°F)
Boiling point / boiling range °C	374°C (705°F) - 615°C (1139°F)

Component Information

Canada

GHS Classification

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