

Material Safety Data Sheet

Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product/Chemical Name: BOSS HVI Hydraulic 15, 22, 36, 46, 68

Manufacturer:

BOSS Lubricants

6303 30 ST SE

Calgary, AB

T2C 1R4

PHONE: (800) 844-9457

FAX: (403-279-2272

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Section 2: COMPOSITION/INFORMATION ON INGREDIENTS

LUBRICATING BASE OIL

SEVERELY REREFINED PETROLEUM DISTILLATE

> 80.00%	5 mg/m3 (mist)	ACGIH TWA
	10 mg/m3 (mist)	ACGIH STEL
	5 mg/m3 (mist)	OSHA PEL

The BASE OIL may be a mixture of any of the following: CAS 64741884, CAS 64741895, CAS 64741964, CAS 64741975, CAS 64742014, CAS 64742525, CAS 64742536, CAS 64742547, CAS 64742627, CAS 64742650, or CAS 72623837.

COMPONENT	CAS NUMBER	TLV/PEL (mg/M3)	WEIGHT %
PROPRIETARY ADDITIVES	MIXTURE	NA	1-2

This material is non-carcinogenic as defined by OSHA, IARC, or NIP

Section 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Oral: LD50 (rat) : >15g/kg

Eye: May be an eye irritant

Skin: Practically Non-Irritating

Inhalation: LC50/4H (rat) : >5,000mg/m

TLV: 5 mg/m3 as oil mist

Eye: Minor irritant

Exposure Limits in Air:

Dermal: Minor irritant

ACGIH/TLV TWA OSHA PEL TWA

5MG/M3

5MG/M3

OSHA PEL STEL

None Established

ACGIH TLV STEL

CAL OSHA TWA

10MG/M3

¹MG/M3

Section 4: FIRST AID MEASURES

Contact with EYES: Immediately flush with large quantities of cool water for at least 15 minutes. Get medical attention.

Contact with SKIN: Wash off with soap and water.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

Ingestion: Do NOT induce vomiting. Drink 4 to 8 ounces of water and see medical attention.

Dermal: Do not use gasolines, thinners or solvents to remove product from skin. Wipe material from skin and remove contaminated clothing. Wash with soap and water, and if necessary a waterless skin cleaner.

Injection: Subcutaneous injection is medical emergency. Seek medical aid immediately.

Section 5: FIRE FIGHTING MEASURES

Flashpoint, CC, °F (°C) 360 ° (182°)

Fire Point, CC, °F (°C) 435° (224°)

Flammable Limits: Lower: 1 % volume (mist) Upper: 10% volume (mist)

Fire Extinguishing Agents: Carbon Dioxide, foam, dry chemical

Special Fire Fighting Procedures: None

Unusual Fire or Explosion Hazard: Material may burn, but not ignite readily

Section 6: ACCIDENTAL RELEASE MEASURES

CHEMTREC EMERGENCY NUMBER (24 hr); (800)424-9300 or (202)483-7616 ACCIDENTAL RELEASE MEASURES

Spills or Leaks: Contain any spills with absorbents to prevent migrations and entry into sewers or streams. Take up small spills with dry chemical absorbent, rags, or clay absorbent. Place into containers for later removal. Large spills contain spill in earthen dikes for later recovery. Report such spills as required to appropriate authorities.

Waste Disposal: It is the responsibility of the user to determine if the material is hazardous waste at the time of disposal. Check before disposing to be sure you are in compliance with all applicable laws and regulations.

Chemtrec/RCRA Emergency Hotline Number: (800) 424-9300

Right-to-Know: None

Protective Measures During Repair and Maintenance of Contaminated Equipment: Refer to Special Protection Information. Wash exposed skin thoroughly with soap and water. Avoid prolonged contact with used oil. Remove soiled clothing. Use oil impervious gloves if frequent or prolonged contact is expected.

TSCA: This material is in compliance with the Toxic Substances Control Act (15USC2601-2629)

Section 7: HANDLING AND STORAGE

Keep containers sealed until ready for use. Avoid excessive long-term storage temperatures to prolong shelf life. Maximum storage temperature: 120F. Store in well ventilated areas.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation (Local, Mechanical, and Special): Use in a well ventilated area with local exhaust ventilation.

Respiratory Protection: None required in normal use. Use only NIOSH/MSHA Organic vapor approved equipment if necessary.

Gloves: Not required in normal use.

Eye Protection: Goggles or safety glasses are recommended.

Other Protective Equipment: Practice good personal hygiene. Wash hands after use and handling.

- Ventilation Requirements:** Use in well ventilated area. In confined space, mechanical ventilation may be required to keep levels of certain components below mandated standards, as evaluated by designated personnel. Keep away from heat, sparks and flames.
- Respiratory:** Normally none required. If high vapor or mist concentrations expected – use respirator approved for organic vapors and mists.
- Eyes:** Avoid contact with eyes. Safety goggles, or chemical splash goggles if splashing is anticipated. Contact Lenses should not be worn.
- Dermal:** Oil impervious gloves if frequent or prolonged contact is expected. Barrier creams that are specific for oil based materials are recommended when gloves are impractical.
- Other Clothing or Equipment:** Wear body-covering work clothes to avoid prolonged or repeated exposure. Launder soiled work clothes before reuse. It is suggested that a source of clean water be available in work area for flushing eyes and skin.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name: **BOSS** HVI Hydraulic 15, 22, 36, 46, 68

Appearance:	Amber Liquid
Odor:	No Odor
Specific Gravity (water = 1):	0.85 - 0.88
Melting Point:	NE
Boiling Point, 760 mmHg, °F (°C):	-600°F (-316°C)
Volatility, weight % at 25C:	Negligible
Evaporation Rate:	Slower than Ether
Vapor Pressure, mmHg at 20C:	-<0.001 mmHg
Solubility in Water:	Insoluble
Pour Point:	10°F
API Gravity:	29°F - 31°F
Vapor Density (Air = 1):	>1
Density:	7.1 lb. /gal
Molecular Weight:	>460
How to detect this substance:	Viscous only. Amber colored liquid with a characteristic petroleum odor and slippery feel.
Stability:	Stable
Combustible:	No
Flammable:	No
Pyrophoric:	No
Compressed Gas:	No
Organic Peroxide:	No
Reactivity:	No
Explosive:	No
Oxidizer:	No

10. STABILITY AND REACTIVITY

Reactivity:	Stable under normal temperatures and pressures.
Incompatibilities:	Strong oxidants.
Hazardous Polymerization:	None.



- Hazardous Decomposition Products:** Thermal decomposition in the presence of air may yield major amounts of oxides of carbon and minor amounts of oxides of sulfur and nitrogen.
- Unusual Fire and Explosion Hazards:** Move container from fire area if you can do so without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Stay away from ends of tanks and drums – Heated containers may rupture, explode or be thrown into the air. Heated vapors may be sensitive to static discharge, resulting in fire or explosion.
- Fire Fighting Procedures:** Withdraw immediately in case of rising sound from venting safety device or discoloration of tank due to fire. Keep storage containers cool with water spray. Use self-contained breathing apparatus (SCBA).

Section 11: TOXICOLOGICAL INFORMATION

- Inhalation:** Low risk of inhalation at ambient temperatures. Mists or fumes may cause drowsiness, dizziness, headache, nausea, or lung irritation or chemical pneumonitis. High concentrations of vapor or mist may be irritating to the respiratory tract. Including nose and throat, may cause difficulty breathing.
- Dermal Contact:** Transient, slight irritant, possible mild allergen. Prolonged or repeated contact may cause redness. Contact with hot material may cause thermal burns.
- Eye Contact:** May be mildly irritating. Direct contact may cause burning, tearing and redness. Contact with hot material may cause thermal burns.
- Ingestion:** Low toxicity. At a Saybolt viscosity of 170 SUS (100°F), the risk of aspiration into the lungs is reduced. If less than 1oz. is ingested, material may pass through the system without harm. On ingestion of large quantities, slight GI discomfort, diarrhea, and headache may occur. Aspiration into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death. Human lethal dose – 1 pint.
- Injection:** Subcutaneous or intramuscular injection may cause irritation, erythema, and/or edema.
- Chronic Exposure:** Prolonged and/or frequent contact may cause drying, cracking (dermatitis) or folliculitis. High oil mist concentrations may lead to oil pneumonia.
- Other Special Effects:** None

Section 12: ECOLOGICAL INFORMATION

This product does not contain toxic chemicals of Section 313 of Title III of Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Section 13: DISPOSAL CONSIDERATIONS

Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

Section 14: TRANSPORT INFORMATION

- D.O.T. Shipping Name:** Not Regulated
- TDG:** Not Regulated
- D.O.T. I.D. Number:** NA
- Reportable Quantity:** NA
- Freight Classification:** NA
- UN Hazard Class:** NA



Special Transportation Notes: None
Notes: NA = Not Applicable
 NE = Not Established

Section 15: REGULATORY INFORMATION

SARA 311 CATEGORIES:

Immediate (Acute) Health Effects: NO
Delayed (Chronic) Health Effects: NO
Fire Hazard: NO
Sudden Release of Pressure Hazard: NO
Reactivity Hazard: NO

WHMIS:

Section 302/(A) – Extremely Hazardous Substances:

This product does not contain Extremely Hazardous Substances of Section 302/(A)

Clean Water Act:

Under Section 311 (b) of the Clean Water Act, discharges or crude oil and petroleum products in any kind of form to surface waters must be immediately reported to the National Response Center: 800-424-8802.

Comprehensive Environmental, Response, Compensation and Liability Act

(CERCLA) – Section 102 Hazardous Substances:

Petroleum and petroleum fractions are excluded from the list of CERCLA hazardous substances by Section 101 (14) of CERCLA.

California Prop 65:

This product may contain chemicals known to the State of California to cause cancer (See also the Health Hazard Information Section).

Section 16: OTHER INFORMATION

NFPA RATINGS: Health 0; Flammability 1; Reactivity 0;

HMIS RATINGS: Health 1; Flammability 1; Reactivity 0;

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE: - Personal Protection Equipment Index recommendation, *- Chronic Effect published evaluations prepared by the National Fire Protection Association (for HMIS ratings).

Indicator). These values are obtained using the guidelines or Association (NFPA) or the National Paint and Coating

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value TWA - Time Weighted Average
 STEL - Short-term Exposure Limit TPQ - Threshold Planning Quantity
 RQ - Reportable Quantity PEL - Permissible Exposure Limit C - Ceiling Limit CAS - Chemical Abstract Service Number
 A1-5 - Appendix A Categories () - Change Has Been Proposed
 NDA - No Data Available NA - Not Applicable

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1).

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