## SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: BOSS HIGH PERFORMANCE MOTOR OIL

Includes grades 5w-20, 5w-30, 10w-30, 20w-50, SAE 30

**SYNONYMS:** Petroleum oil; Lube oil; Petroleum hydrocarbon; Lubricant.

**PRODUCT CODE:** Prefix 21

**PRODUCT USE:** For lubricating passenger car motors.

If these products are used in combination with other products, refer to the

Material Safety Data Sheet for those products.

24 HOUR EMERGENCY PHONE NUMBER MEDICAL AND TRANSPORTATION (SPILL):

This number is for emergency use only. If you desire non-emergency product information, please call a

1-800-44-9457

phone number listed below.

SUPPLIER: BOSS LUBRICANTS

112, 6303 – 30 STREET SE Calgary, AB T2C 164

Canada 403-279-2223 800-844-9457

www.bosslubricants.com

ISSUE DATE: December 1, 2011

## **SECTION 2: HAZARDOUS INDENTIFICATION**

#### **EMERGENCY OVERVIEW**

## **APPEARANCE**

Liquid, amber, petroleum odor.

**CAUTION!** 

### **HEALTH HAZARDS**

May irritate eyes and skin. May be harmful if swallowed.

## **OSHA Regulated Chemicals**

No information is available.

#### POTENTIAL HEALTH EFFECTS

**INHALATION:** These products are not likely to present an inhalation hazard at normal

(BREATHING): temperatures and pressures. However, when aerosolizing, misting, or heating

these products, high concentrations of generated vapor or mist may irritate the

respiratory tract (nose, throat, and lungs).

**EYES:** May cause irritation.

**SKIN:** May cause irritation. Not likely to be absorbed through the skin in harmful

amounts.

**INGESTION** May be harmful if swallowed. May cause throat irritation, nausea, vomiting,

(SWALLOWING): and diarrhea.

MEDICAL CONDITIONS Individuals with pre-existing respiratory tract (nose, throat, and lungs), eye, and/or skin disorders may have increased

susceptibility to the effects of exposure.

**CHRONIC:** Prolonged or repeated inhalation of oil mist may cause pneumonia, lung tissue

inflammation, and/or fibrous tissue formation. Prolonged or repeated eye contact my cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying,

cracking, redness, itching, and/or swelling (dermatitis).

**CANCER** No know carcinogenicity. For more information, see **SECTION11**:

INFORMATION: CARCINOGENICITY.

Also see SECTION 15: CALIFORNIA

## POTENTIAL ENVIRONMENTAL EFFECTS

Not available. Also see **SECTION 12: ECOLOGICAL INFORMATION.** 

## SECTION 3: COMPSOTION/INFORMATION ON INGREDIENTS

AS#	Component	Synonym	Wt. Percent*
64742-58-1	Lubricating oils, petroleum	Hydrotreated	56-85
	hydrotreated spent	paraffinic base oil	
Trade Secret	Mineral oil	Trade Secret	0-35
64742-01-4	Residual oils (petroleum), solvent	Bright Stock	0-25
Mixture**	Base oil, mixture	Not available	0-25
64742-62-7	Residual oils (petroleum), solvent	Bright Stock	0-25
	dewaxed		
72623-83-7	Lubricating oils, (petroleum), C>5,	Bright Stock	0-25
	hydotreated bright stock		
72623-86-0	Neutral oil	Not Available	0-25
Trade Secret	Acrylic copolymer	Not Available	0-25
64742-54-7	Petroleum distillates, heavy paraffinic,	Not Available	0-25
	C20-C50		
64742-55-8	Petroleum distillates, light paraffinic	Not Available	0-25
	C15-C-30		
68649-42-3	Phosphorodithioc acid, O,0-di-C1-14-	Dialkyl (C1-C14)	0-6
	Alkyl esters, zinc salts.	dithiophosphoric	

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Oil Mist, mineral (8012-95-1).

## **Section 4: FIRST AID MEASURES**

INHALATION Remove to fresh air. If not breathing, give artificial respiration. If breathing is (BREATHING): difficult, give oxygen. Oxygen should only be administered by qualified personnel.

Someone should stay with victim. Get medical attention if breathing difficulty

persists.

EYES: If irritation or redness from exposure to vapor develops, move away form exposure

into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water,

holding eyelids apart, for 15 minutes. Get medical attention.

SKIN: Remove affected clothing and shoes. Wash skin thoroughly with soap and water.

> Get medical attention if irritation or pain develops or persists. If product is injected under pressure into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, a physician should immediately evaluate the

individual as a medical emergency.

INGESTION Do not induce vomiting. Immediately get medical attention. Call 1-800-844-9457

> for additional information. If spontaneous vomiting occurs, keep the head below hips to avoid breathing the product into the lungs. Never give anything by mouth

To an unconscious person.

NOTE TO Treat symptomatically and supportively. Treatment may vary with the condition **PYSICIANS:** 

of victim and specifics of incident. Call 1-800-844-9457 for additional information.

## **SECTION 5: FIRE FIGHTING MEASURES**

(SWALLOWING):

HAZARDOUS COMBUSTION Decomposition and combustion materials may be toxic. **PRODUCTS:** 

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 A positive-pressure, self-contained breathing apparatus (SCBA)

**FIREFIGHTERS:** and full-body protective equipment are required for fire emergencies.

<sup>\*</sup>Even though the concentration range does not fall under the ranges prescribed by WHMIS, this is the actual range which varies with each batch of the product.

<sup>\*\*</sup>The base oil may be a mixture of the following CAS#'S 8042-47-5,64742-46-7, 64742-47-8, 64742-52-5, 64742-54-7, 72623-84-8, 72623-85-9, 72623-86-0, 72623-87-1, 178603-64-0, 178603-66-2, 17603-65-1, 445411-73-4.

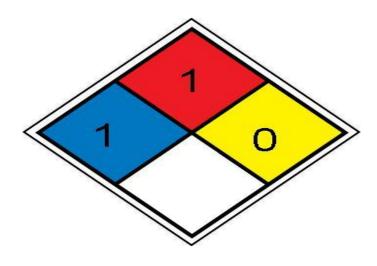
**EXTINGUISHING MEDIA:** Carbon dioxide, regular foam, dry chemical, water spray or water fog.

NFPA 704 This information is intended solely for the use by individuals trained

**HAZARD INDENTIFICATION:** in this system.

HEALTH HAZARD (BLUE)

FIRE HAZARD (RED)



REACTIVITY (YELLOW)

SPECIFIC HAZARD (WHITE)

**FIRE FIGHTING INSTRUCTIONS:** Keep storage containers cool with water spray.

FIRE AND EXPLOSION HAZARDS: Heated containers may rupture. "Empty" containers may contain

residue and can be dangerous. Products are not sensitive to mechanical

impact or static discharge.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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 CONTROL/PERSONAL PROTECTION.** 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. Contain spill as a liquid for possible recovery, or absorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Dike far ahead of liquid spill for collection and alter disposal.

## PERFORMANCE PEROFMANCE MOTOR OILS

### SECTION 7: HANDLING AND STORAGE

**HANDLING:** Keep away from sparks or flame. Where flammable mixtures may be present, equipment

safe for such locations should be used. Use clean tools. When transferring large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. These products have a low vapor pressure and are not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating these products, do not breathe vapor or mist. Use in a

well ventilated area. Avoid contact with eyes, skin, clothing, and shoes.

SHIPPING AND STORING:

OSHA: NIOSH: 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.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **EXPOSURE GUIDELINES:**

**Component Exposure Limits** 

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

ACGIH: 5mg/m3 TWA (sampled by method that does not collect vapor) (related to Oil mist,

mineral)

10mg/m3 STEL (sampled by method that does not collect vapor) (related to Oil mist,

mineral)

OSHA Final: 5mg.m3 TWA (related to Oil mist, mineral)
OSHA Vacated: 5mg/m3 TWA (related to Oil mist, mineral)
NIOSH: 5mg/m3 TWA (related to Oil mist, mineral)

10mg/m3 STEL (related to Oil mist, mineral)

### Mineral oil (Not Available)

ACGIH: 5mgm3 TWA (sampled by method that does not collect vapor) (related to Oil mist,

mineral)

10mg/m3 STEL (sampled by method that does not collect vapor) (related to Oil mist,

mineral)

OSHA Final: 5mg/m3 TWA (related to Oil mist, mineral)
OSHA Vacated: 5mg/m3 TWA (related to Oil mist, mineral)
NIOSH: 5mg/m3 TWA (related to Oil mist, mineral)
10mg/m3 STEL (related to Oil mist, mineral)

### Lubricating oils, (petroleum), C>25, hydrotreated birghtstock (72623-83-7

ACGIH: 5mg/m3 TWA (sampled by method that does not collect vapor) (related to Oil mist,

mineral)

10mg/m3 STEL (related to Oil mist, mineral) 5mg/m3 TWA (related To Oil mist, mineral) 5mg/m3 TWA (related to Oil mist (mineral)

10mg/m3 STEL (related to Oil mist (mineral)

#### Residual oils (petroleum), hydrotreated (64742-54-7)

ACGIH: 5mg/m3 TWA (sampled by method that does not collect vapor( (related to Oil mist,

mineral)

10mg/m3 STEL (related to Oil mist, mineral)

OSHA: 5mg/m3 TWA (related to Oil mist, mineral)
NIOSH: 5mg/m3 TWA (related to Oil mist (mineral)
10mg/m3 STEL (related to Oil mist (mineral)

Neutral oil (72623-86-0)

OSHA:

NIOSH:

ACGIH: 5mg/m3 TWA (sampled by method that does not collect vapor) (related to Oil mist,

mineral)

10mg/m3 STEL (related to Oil mist, mineral) 5mg/m3 TWA (related to Oil mist, mineral) 5mg/m3 TWA (related to Oil mist (mineral)

10mg/m3 STEL (related to Oil mist (mineral)

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

ACGIH: 5mg/m3 TWA (sampled by method that does not collect vapor) (related to Oil mist,

mineral)

OSHA: 10mg/m3 STEL (related to Oil mist, mineral) 5mg/m3 TWA (related to Oil mist, mineral) 5mg/m3 TWA (related to Oil mist (mineral)

10mg/m3 STEL (related to Oil mist (mineral)

**ENGINEERING** Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use

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.

PERSONAL PROTECTIVE EQUIPMENT

**RESPIRATORY** Not normally needed. Use NIOSH-certified P- or R- series particulate filter

**PROTECTION:** 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

**EYE** Where eye contact is likely, wear chemical goggles; contact lens use is not

**PROTECTION:** recommended.

**SKIN** Where skin contact is likely, wear neoprene, nitrile or equivalent protective gloves: use

**PROTECTION:** of natural rubber or equivalent gloves is recommended.

When products are heated and skin contact is likely, wear heat-insulating, gloves, boots,

and other protective clothing.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant facesheild, boot, apron, coveralls, long sleeve shirts, or

other protective clothing.

**PERSONAL** Use good personal hygiene. Wash thoroughly with soap and water after handling

**HYGIENE:** product and before eating, drinking, or using tobacco products. Clean affected clothing,

shoes, and protective equipment before reuse. Discard leather articles, such as shoes,

saturated with these products.

OTHER Where spills and splashes are likely, facilities storing or using these products should

**PROTECTIVE** be equipped with an emergency eyewash and shower, both equipped with clean water

**EQUIPMENT** in the immediate work area.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE,** Liquid, amber, petroleum odor.

APPEARANCE, AND ODOR:

**ODOR THRESHOLD:** Not available

MOLECULAR WEIGHT: Not applicable

**SPECFIC GRAVITY:** 0.88 (water=1) (approximately)

**DENSITY:** 703 LB/US gal (880 g/l) (approximately)

VAPOR DENSITY: Not available

**VAPOR PRESSURE:** less than 0.1 m Hg at 68°F (20°C)

**BOILING POINT:** 475°F (246°C) (minimum)

**FREEZING/MELTING POINT:** Not available [pour point 0°F(-18°C) (maximum].

**pH:** Not available.

**EVAPORATION RATE:** Not available.

**SOLUBILITY IN WATER:** Insoluble

**FLASH POINT:** 383°F (195°C) (minimum) Cleveland Open Cup

FLAMMABLE LIMITS IN AIR: LOWER: Not available

**UPPER:** Not available

**AUTOIGNITION TEMPERATURE:** Not available

## SECTION 10: SATBILITY 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

None under normal temperatures and pressures. See also **SECTION 5**:

DECOMPOSITION

PRODUCTS:

HAZARDOUS COMBUSTION PRODUCTS.

#### SECTION 11: TOXICOLOGICAL INFORMATION

### **TOXICITY DATA:**

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 dewaxed (64742-62-7)

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 (petroleum), hydrotreated (64742-54-7)

Inhalation LC50 RAT: 2.18 mg/L/4H Oral LD50 Rat: >2000 mg/kg Dermal LD50 Rabbit:>2000 mg/kg

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

Inhalation LD50 rat: 2.18 mg/L/4H Oral LD50 Rat:>5000 mg/kg Dermal LD50 Rabbit:>2000 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 50 Rabbit:>2000 mg/kg

### Mineral oil (Not Available)

Oral ld50 Mouse 22 g/kg (related to Oil mist, mineral)

### **ACUTE EFFECTS:**

These products are not likely to present an inhalation hazard at normal temperatures and pressures. However, when aerosolizing, misting, or heating these products, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs). May cause eye and skin irritation. Not likely to be absorbed through the skin in harmful amounts. May be harmful if swallowed. May cause throat irritation, nausea, vomiting, and diarrhea.

**REPEATED DOSE EFFECTS:** Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung

tissue inflammation, and or fibrous tissue formation. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may

cause drying, cracking, redness, and/or swelling 9dermatitis).

Experimental evidence suggests that these products do not cause mutagenesis. Based on best current information, there is no known sensitization, reproduce

toxicity, or teratogenicity associated with these products.

**CARCINOGENICITY:** Based on best current information, there is no known carcinoigenicity as

categorized by ACGIH A1 OR A2 substances; as categorized by IARC GROUP

1, Group 2A, or Group 2B agents; or as listed by NTP as either known as

carcinogens or substances for which there is limited evidence of

Carcinogenicity in humans or sufficient evidence of carcinogenicity in

experimental animals.

Also see **SECTION 15: CALIFORNIA.** 

TARGET ORGAN EFFECTS: Prolonged or repeated inhalation of oil mist may cause pneumonia, lung tissue

inflammation, and/or fibrous tissue formation.

### **SECTION 12: ECOLOGICAL INFORMATION**

**ECTOXICITY:** No information available for the product.

Component Analysis-Ecotoxicity-Aquatic Toxicity

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

Test & SpeciesResultsConditions96 Hr LC50 Brachydanio rerio79.6mg/Lsemi-static96 Hr LC50 Pimephales promelas3.2mg/Lsemi-static

Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based

(72623-87-1)

Test Species Results Conditions

96 Hr LC50 Oncorhyynchus mykiss >5000mg/L

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

Test Species Results Conditions

96 Hr LD50 Pimephales promelas >5000mg/L

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

Test Species Results Conditions

96 Hr LC50 Leomis macrochirus >1000mg/L

Lubricating oils, petroleum, C15-30, hydrotreated neutral oil-based

Test Species Results Conditions

96 Hr LC50 Oncorhynchus mykill >5000mg/L

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

Test Species Results Conditions

96 Hr LC 50 Pimephales promelas 1-5mg/L static

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

Test Species Results Conditions

96 Hr LC50 Onocorhynchus >5000mg/L

Petroleum distillates, hydrotreated heavy paraffinic (64742-54-7

Test Species Results Conditions

96 Hr LC50 Pimephales promelas >5000

**PERSISTANCE**/ No information available.

**DEGRADABILITY:** 

No information available.

BIOACCUMULATION/ ACCUMULATION:

**MOBILITY IN** No information available.

**ENVIRONMENTAL MEDIA:** 

OTHER ADVERSE EFFECTS: Not available.

OCTANOL/WATER Not available.

**PARTITION COEFFICIENT:** 

VOLATILE ORGANIC Negligible.

### **SECTION 13: DISPOSAL CONSIDERATIONS**

**DISPOSAL:** dispose in accordance with federal, state, provincial, and local regulations. Regulations

may also apply to empty containers. The responsibility for proper waste lies with the owner of the waste. Contact BOSS LUBRICANTS regarding proper recycling or

disposal.

**UEPA WASTE** These products, if discarded, are not expected to be a characteristic or listed hazardous

waste. If recycled in the USA, they must be managed in accordance with 40 CFR part 279. Processing, use, or contamination by the user may change the waster codes(s)

applicable to the disposal of these products.

### **SECTION 14: TRANSPORT INFORMATION**

**DOT:** Shipping Name: Not regulated

TDG: Shipping Name: Not regulated

EMERGENCY RESPONSE GUIDE Not applicable

NUMBER: Reference North American Emergency Response Guidebook

### SECTION 15: REGULATORY INFORMATION

#### USA REGULATIONS

OSHA Regulated Chemicals

No information is available.

SARA SECTION 302

**AND 304**:

Based on the ingredient 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 SECTION 311** 

312:

These products pose the following health hazard(s) as defined in 40 CFR Part 370 AND are subject to the requirements of Section 311 and 312 oft Title III of the Superfund

Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard Delayed (Chronic) Health Hazard

**SARA SECTION 313:** These products contain "toxic" chemical(s) 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.

Phosphorodithioc acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-4203)

1.0% de minimis concentration (Chemical Category N982) (related to Zinc compinds)

**CERCLA:** Based on the ingredient(s) listed in SECTION 3, this product does not contain any

> "hazardous substances" listed pursuant to the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302 Table 302.4.

TSCA: All the components of this product are listed on, or are exempted from the requirement to

be listed on, the TSCA Inventory.

**CALIFORNIA:** This product does not contain detectable amounts of any chemical known to the State of

California to cause cancer.

This product does not contain detectable amounts of any chemical known to the State of

California to cause birth defects or other reproductive harm.

### CANADIAN REGULATIONS

These products have been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by CPR.

CANADIAN ENVIRONMENTAL PROTECTION ACT

(CEPA):

The components of this product are listed on, or are exempted from the requirements

to be listed on, the Canadian Domestic Substances List (DSL).

#### **SECTION 16: OTHER INFORMATION**

**REVISION INFORMATION:** This MSDS has been revised in the following sections:

> Section 3 (Composition), Section 8 (Exposure Limits, Section 11 (Toxicology Fields), Section 12 (Component Ecotoxicity), Section 13

(Regulatory)< Section 16 (Revision)>

LABEL/OTHER INFORMATION: Not available.

User assumes all risks incident to the use of this (these) product(s). To the best of our knowledge, the information contained herein is accurate. However, BOSS LUBRICANTS assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the product(s) as supplied to the user.