## MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

Material name Bel-Ray Si-7 Full Synthetic 2T Engine Oil

**Product Code MSDS Number** 6421 Version # 1.0

**Revision date** 06-18-2010 Product use Lubricant

Manufacturer information Bel-Ray Company, Inc.

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Farmingdale, NJ 07727 United States of America

+1 732 938 2421

CHEMTREC: +1 703-527-3887 (outside USA)

CHEMTREC: 800-424-9300 (USA)

#### 2. Hazards Identification

**Emergency overview** CAUTION

Combustible liquid and vapor.

This is a consumer care product that is safe for consumers when used according to the labe directions. Like many consumer products, a small number of individuals may experience reactions such as redness, rash and / or swelling upon prolonged or repeated skin contact or eye contact.

**OSHA** regulatory status

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

**Routes of exposure** Inhalation.

**Eyes** Contact with eyes may cause irritation.

Skin May cause skin irritation in susceptible persons.

Inhalation May be irritating. Prolonged inhalation may be harmful. Ingestion Health injuries are not known or expected under normal use.

**Target organs** Central nervous system.

**Chronic effects** May cause central nervous system disorder (e.g., narcosis involving a loss of coordination,

weakness, fatigue, mental confusion and blurred vision) and/or damage.

Signs and symptoms Narcosis. Decrease in motor functions. Behavioral changes. Irritation of nose and throat. Irritation

of eyes and mucous membranes.

Potential environmental

effects

May cause long-term adverse effects in the environment.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent	
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	64742-47-8	20 - 40	
Interchangeable base oils, one or more: 64742-54-7, 64742-65-0, 64741-88-4		20 - 40	

#### 4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical

attention if irritation develops and persists.

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

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Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content Ingestion

doesn't get into the lungs. IF SWALLOWED: Immediately call a POISON CENTER or

doctor/physician. Never give liquid to an unconscious person.

Notes to physician

General advice Call a physician if symptoms develop or persist. Ensure that medical personnel are aware of the

material(s) involved, and take precautions to protect themselves.

# 5. Fire Fighting Measures

Flammable properties Combustible by OSHA criteria. NFPA Rating Fire = 2. Materials that must be moderately heated or

exposed to relative high ambient temperatures before ignition can occur. Heat may cause the

containers to explode. Runoff to sewer may cause fire or explosion hazard.

**Extinguishing media** 

Suitable extinguishing

media

Water. Water spray. Foam. Dry powder. Carbon dioxide (CO2).

Unsuitable extinguishing

media

Do not use a solid water stream as it may scatter and spread fire.

Fire fighting

equipment/instructions

Not available.

Specific methods

In the event of fire and/or explosion do not breathe fumes. Cool containers exposed to flames with

water until well after the fire is out.

Symptoms may be delayed.

**Hazardous combustion** 

products

Carbon monoxide and carbon dioxide.

#### 6. Accidental Release Measures

Personal precautions Keep unnecessary personnel away. Keep upwind. Keep out of low areas. Keep people away from

> and upwind of spill/leak. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. In case of spills,

beware of slippery floors and surfaces.

**Environmental precautions** 

Prevent further leakage or spillage if safe to do so. Do not contaminate water.

Methods for containment

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use water

spray to reduce vapors or divert vapor cloud drift.

Methods for cleaning up

Should not be released into the environment.

Large Spills: Dike far ahead of spill for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to

remove residual contamination. Following product recovery, flush area with water.

Never return spills in original containers for re-use.

## 7. Handling and Storage

Handling DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect

material from direct sunlight. Do not smoke. All equipment used when handling the product must

be grounded. Avoid prolonged exposure. Avoid release to the environment.

Storage Class IIIB Combustible Liquid.

> The pressure in sealed containers can increase under the influence of heat. Keep away from heat and sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Room temperature - normal conditions. Store in a well-ventilated place. Keep container tightly closed. Keep away from food, drink and animal feedingstuffs. Keep out of

the reach of children.

# 8. Exposure Controls / Personal Protection

#### Occupational exposure limits

**ACGIH** 

Components	Туре	Value	Form
Interchangeable base oils, one or more: 64742-54-7, 64742-65-0, 64741-88-4	STEL	10.0000 mg/m3	Mist.
	TWA	5.0000 mg/m3	Mist.

U.S. - OSHA

ComponentsTypeValueFormInterchangeable base oils, one or more: 64742-54-7,<br/>64742-65-0, 64741-88-4PEL5.0000 mg/m3Mist.

TWA

Engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates

should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

5.0000 mg/m3

Mist.

Personal protective equipment

**Eye / face protection** Not normally needed.

**Skin protection** No special protective equipment required.

**Respiratory protection** When workers are facing concentrations above the exposure limit they must use appropriate

certified respirators.

General hygiene considerations

When using do not smoke.

## 9. Physical & Chemical Properties

AppearanceOily.ColorBlue.

Odor Characteristic.
Odor threshold Not available.

Physical stateLiquidFormLiquid.

pH Not available.
 Melting point/Freezing point Not available.
 Boiling point 392 °F (200 °C)

Flash point 194 °F (90 °C) Pensky-Martens Closed Cup

**Evaporation rate**Not available. **Flammability limits in air**,
5 estimated

upper, % by volume

Flammability limits in air, lower, % by volume

0.6 estimated

Vapor pressure 0.0129 hPa estimated

Density866 kg/m³Vapor densityNot available.

Specific gravity 0.866

**Relative density** 0.8356 lb/cu ft estimated

Solubility (water)

Solubility (other)

Oil

Solvents

Solvenis

Partition coefficient

(n-octanol/water)

Not available.

Auto-ignition temperature 483.8 °F (251 °C) estimated

**Decomposition temperature** Not available.

**VOC** 30 %

**Viscosity** 43.62 cSt @ 104 °F (40 °C)

Percent volatile 30.52 % estimated

## 10. Chemical Stability & Reactivity Information

**Chemical stability** Risk of ignition. Material is stable under normal conditions.

Conditions to avoidHeat, flames and sparks.Incompatible materialsStrong oxidizing agents.

# 11. Toxicological Information

## Toxicological data

Product	Test Results
Bel-Ray Si-7 Full Synthetic 2T Engine Oil (Mixture)	Acute Dermal LD50 Rabbit: 18950 mg/kg estimated
	Acute Inhalation LC50 Rat: 55738 mg/m <sup>3</sup> estimated
	Acute Inhalation LC50 Rat: 309 mg/l estimated

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

Local effects Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Contact with eyes

may cause irritation. May cause skin irritation.

**Chronic effects** Hazardous by OSHA criteria. Prolonged inhalation may be harmful. Repeated absorption may cause

disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause

chronic effects.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**Neurological effects** Hazardous by OSHA criteria. **Further information** Symptoms may be delayed.

## 12. Ecological Information

#### Ecotoxicological data

Product	Test Results
Bel-Ray Si-7 Full Synthetic 2T Engine Oil (Mixture)	LC50 Fish: 11.15 mg/l 96.00 hours estimated
Components	Test Results
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT (64742-47-8)	LC50 Rainbow trout, donaldson trout (Oncorhynchus mykiss): 2.9 mg/l 96.00 hours

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

**Ecotoxicity** Contains a substance which causes risk of hazardous effects to the environment.

**Environmental effects** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Persistence and degradability Not available.

## 13. Disposal Considerations

**Disposal instructions** Do not allow this material to drain into sewers/water supplies. This product, in its present state,

when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in

accordance with all applicable regulations.

Waste from residues / unused products

Dispose of in accordance with local regulations.

## 14. Transport Information

#### DOT

**Basic shipping requirements:** 

**UN number** NA1993

Proper shipping name Combustible liquid, n.o.s. (DISTILLATES (PETROLEUM), HYDROTREATED LIGHT)

Hazard class Comb liq Subsidiary hazard class None Packing group Ш

Additional information:

Special provisions IB3, T1, T4, TP1

Basic shipping requirements: Labels required None

**Additional information:** 

Packaging exceptions 150

Material name: Bel-Ray Si-7 Full Synthetic 2T Engine Oil 99440 Version #: 1.0 Revision date: 06-18-2010 Print date: 06-18-2010 Packaging non bulk203Packaging bulk241ERG number128

IATA

Not regulated as dangerous goods.

**IMDG** 

Not regulated as dangerous goods.

Further information FOR DOT: This material is not regulated under 49 CFR if in a container of 119 gallon capacity or

less.

## 15. Regulatory Information

**US federal regulations**This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard,

29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

#### **CERCLA (Superfund) reportable quantity**

None

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - No

Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

Inventory name

Section 302 extremely

hazardous substance

Country(s) or region

Section 311 hazardous

chemical

No

No

## **Inventory status**

Australia

State regulations

Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
New Zealand	New Zealand Inventory	Yes

WARNING: This product contains a chemical known to the State of California to cause cancer.

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

Toxic Substances Control Act (TSCA) Inventory

Australian Inventory of Chemical Substances (AICS)

# US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ETHYLBENZENE (CAS 100-41-4) Listed: June 11, 2004 Carcinogenic.

#### US - New Jersey Community RTK (EHS Survey): Reportable threshold

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT 10000 LBS

(CAS 64742-47-8)

United States & Puerto Rico

#### US - Pennsylvania RTK - Hazardous Substances: Listed substance

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT Listed.

(CAS 64742-47-8)

Interchangeable base oils, one or more: 64742-54-7, Listed.

64742-65-0, 64741-88-4 (CAS )

#### 16. Other Information

**Further information** HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings Health: 1\*

Flammability: 2 Physical hazard: 0

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On inventory (yes/no)\*

Yes

Yes

NFPA ratings Health: 1

Flammability: 2 Instability: 0

**Disclaimer** Bel-Ray Company cannot anticipate all conditions under which this information and its product, or

the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. 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.

**Issue date** 06-18-2010

Material name: Bel-Ray Si-7 Full Synthetic 2T Engine Oil 99440 Version #: 1.0 Revision date: 06-18-2010 Print date: 06-18-2010