



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name V-Twin Semi-Synthetic Engine Oil 20W-50
Product Code 96910
MSDS Number 6262
Version # 1.1
Revision date 01-11-2012
Product use 4T Motorcycle Engine Oil
Manufacturer information Bel-Ray Company, Inc.
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Farmingdale, NJ 07727
United States of America
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CHEMTREC: +1 703-527-3887 (outside USA)
CHEMTREC: 800-424-9300 (USA)

2. Hazards Identification

Emergency overview CAUTION

Harmful in contact with eyes. Cancer hazard. This is a consumer care product that is safe for consumers when used according to the label 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. Ingestion. Skin contact. Eye contact.

Eyes Eye contact may result in corneal injury. Contact may irritate or burn eyes. Do not get this material in contact with eyes.

Skin Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. May cause skin irritation in susceptible persons. Avoid contact with the skin.

Inhalation May cause cancer by inhalation. Prolonged inhalation may be harmful. Avoid breathing dust/fume/gas/mist/vapors/spray.

Ingestion Components of the product may be absorbed into the body by ingestion. Do not ingest.

Target organs Eyes. RESPIRATORY SYSTEM. Skin.

Chronic effects Conjunctiva. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Signs and symptoms Corneal damage. Conjunctivitis. Defatting of the skin. Skin irritation. Rash.

Potential environmental effects Components of this product are hazardous to aquatic life. May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Distillates (petroleum), Hydrotreated Heavy Naphthenic	64742-52-5	0 - 90
Distillates (petroleum), Solvent-refined Heavy Paraffinic	64741-88-4	0 - 90
Paraffin Oils (petroleum), Catalytic Dewaxed Light	64742-71-8	0 - 90
White Mineral Oil (petroleum)	8042-47-5	0 - 90
Antimony, Tris(dipentylcarbamodithioato)	15890-25-2	1 - 2.5
Other components below reportable levels		10 - 20

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 immediately.

Skin contact

Remove and isolate contaminated clothing and shoes. Wash off with warm water and soap. For minor skin contact, avoid spreading material on unaffected skin. Get medical attention if irritation develops and persists.

Inhalation

Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician if symptoms develop or persist.

Ingestion

Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If ingestion of a large amount does occur, call a poison control center immediately. Never give liquid to an unconscious person.

Notes to physician

In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General advice

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation.

5. Fire Fighting Measures

Flammable properties

Not flammable by OSHA criteria. Not combustible by OSHA criteria.

Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

Water. Do not use water jet as an extinguisher, as this will spread the fire.

Protection of firefighters

Protective equipment and precautions for firefighters

Wear suitable protective equipment.

Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Hazardous combustion products

May include oxides of nitrogen. Carbon monoxide and carbon dioxide.

6. Accidental Release Measures

Personal precautions

Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them. 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. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

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

Never return spills in original containers for re-use. For waste disposal, see section 13 of the MSDS.

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 get this material in contact with eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid prolonged exposure. Avoid release to the environment.

Storage

Keep away from heat, sparks and open flame. 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. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components

Distillates (petroleum),
Hydrotreated Heavy
Naphthenic (64742-52-5)

Type

TWA

Value

5 mg/m3

Form

Inhalable Fraction.

US. ACGIH Threshold Limit Values

Components

Antimony, Tris(dipentylca
rbamodithioato)
(15890-25-2)

Type

TWA

Value

0.5 mg/m3

Form

Paraffin Oils (petroleum),
Catalytic Dewaxed Light
(64742-71-8)

TWA

5 mg/m3

Inhalable fraction.

White Mineral Oil
(petroleum) (8042-47-5)

TWA

5 mg/m3

Inhalable fraction.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components

Antimony, Tris(dipentylca
rbamodithioato)
(15890-25-2)

Type

PEL

Value

0.5 mg/m3

Form

Distillates (petroleum),
Hydrotreated Heavy
Naphthenic (64742-52-5)

PEL

5 mg/m3

Mist.

2000 mg/m3
500 ppm

Distillates (petroleum),
Solvent-refined Heavy
Paraffinic (64741-88-4)

PEL

5 mg/m3

Mist.

2000 mg/m3
500 ppm

Paraffin Oils (petroleum),
Catalytic Dewaxed Light
(64742-71-8)

PEL

5 mg/m3

Mist.

White Mineral Oil
(petroleum) (8042-47-5)

PEL

5 mg/m3

Mist.

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.

Personal protective equipment

Eye / face protection

Do not get in eyes. Chemical goggles are recommended. Eye wash fountain is recommended.

Skin protection

Wear appropriate chemical resistant clothing. Chemical resistant gloves.

Respiratory protection

Wear positive pressure self-contained breathing apparatus (SCBA).

General hygiene considerations

Do not get in eyes. Avoid contact with skin. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance

Not available.

Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Vapor pressure	0 hPa estimated
Density	890 kg/m ³
Vapor density	Not available.
Boiling point	> 564.8 °F (> 296 °C)
Melting point/Freezing point	Not available.
Solubility (water)	Negligible
Solubility (other)	Oil
Specific gravity	0.89
Relative density	Not available.
Flash point	384.8 °F (196 °C) Pensky-Martens Closed Cup
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	500 °F (260 °C) estimated
VOC	0.84 % estimated
Viscosity	160.7 cSt ASTM D445
Percent volatile	0.08 % estimated
Other data	
Flammability class	Combustible IIIB estimated
Viscosity temperature	104 °F (40 °C)

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Heat, flames and sparks. Avoid temperatures exceeding the flash point.
Incompatible materials	Not available.
Hazardous decomposition products	Nitrogen oxides (NOx). At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

11. Toxicological Information

Toxicological data	
Product	Test Results
V-Twin Semi-Synthetic Engine Oil 20W-50 (Mixture)	Acute Oral LD50 Rat: 2364.07 g/kg estimated
Components	Test Results
Antimony, Tris(dipentylcarbamodithioato) (15890-25-2)	Acute Dermal LD50 Rabbit: > 16000 mg/kg Acute Oral LD50 Rat: > 16000 mg/kg
Local effects	Components of the product may be absorbed into the body through the skin. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Contact may irritate or burn eyes. Contact with eyes may cause irritation. May cause skin irritation.
Chronic effects	Hazardous by OSHA criteria. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.
Carcinogenicity	Hazardous by OSHA criteria.

ACGIH Carcinogens

Distillates (petroleum), Hydrotreated Heavy Naphthenic MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, PURE, HIGHLY AND SEVERELY REFINED, INHALABLE FRACTION (CAS 64742-52-5)	A4 Not classifiable as a human carcinogen.
Distillates (petroleum), Solvent-refined Heavy Paraffinic MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, PURE, HIGHLY AND SEVERELY REFINED, INHALABLE FRACTION (CAS 64741-88-4)	A4 Not classifiable as a human carcinogen.
Paraffin Oils (petroleum), Catalytic Dewaxed Light MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, PURE, HIGHLY AND SEVERELY REFINED, INHALABLE FRACTION (CAS 64742-71-8)	A4 Not classifiable as a human carcinogen.
White Mineral Oil (petroleum) MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, PURE, HIGHLY AND SEVERELY REFINED, INHALABLE FRACTION (CAS 8042-47-5)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

MINERAL OILS, HIGHLY-REFINED (CAS 8042-47-5)	3 Not classifiable as to carcinogenicity to humans.
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12. Ecological Information

Ecotoxicological data

Product	Test Results
V-Twin Semi-Synthetic Engine Oil 20W-50 (Mixture)	EC50 Daphnia: 1158.39 mg/l 48 hours estimated LC50 Fish: 4102.84 mg/l 96 hours estimated

* Estimates for product may be based on additional component data not shown.

Ecotoxicity	Components of this product are hazardous to aquatic life.
Environmental effects	Harmful to aquatic organisms. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence and degradability	Not available.

13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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.
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CERCLA/SARA Hazardous Substances - Not applicable.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Antimony, Tris(dipentylcarbamodithioato) (CAS 15890-25-2)	1.0 % N010
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US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substanceAntimony, Tris(dipentylcarbamodithioato) (CAS
15890-25-2)

Listed. N010

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No**Section 302 extremely
hazardous substance** No**Section 311 hazardous
chemical** No**Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

State regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - New Jersey RTK - Substances: Listed substance

Antimony, Tris(dipentylcarbamodithioato) (CAS 15890-25-2)	Listed.
Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)	Listed.
Distillates (petroleum), Solvent-refined Heavy Paraffinic (CAS 64741-88-4)	Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)	Listed.
Paraffin Oils (petroleum), Catalytic Dewaxed Light (CAS 64742-71-8)	Listed.
White Mineral Oil (petroleum) (CAS 8042-47-5)	Listed.

16. Other Information**Further information**

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

HMIS® ratingsHealth: 1*
Flammability: 1
Physical hazard: 0**NFPA ratings**Health: 1
Flammability: 1
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.

Issue date

01-11-2012

**This data sheet contains
changes from the previous
version in section(s):**

Hazards Identification: Emergency overview
First Aid Measures: Inhalation
Accidental Release Measures: Personal precautions
Handling and Storage: Handling
Exposure Controls / Personal Protection: Respiratory protection
Physical & Chemical Properties: Appearance
Physical & Chemical Properties: Color
Physical & Chemical Properties: Odor