MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name V-Twin Mineral Engine Oil 20W-50

Product Code 96905 **MSDS Number** 6267 Version # 1.1

Revision date 01-11-2012

Product use 4T Motorcycle Engine Oil Manufacturer information Bel-Ray Company, Inc.

P.O. Box 526

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 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

May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Distillates (petroleum), Solvent-dewaxed Heavy Paraffinic	64742-65-0	0 - 100
Distillates (petroleum), Solvent-refined Heavy Paraffinic	64741-88-4	0 - 100
Paraffin Oils (petroleum), Catalytic Dewaxed Light	64742-71-8	0 - 100
Other components below reportable levels		2.5 - 10

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.

MSDS US 96905 Version #: 1.1 Revision date: 01-11-2012 Print date: 01-11-2012 1/6 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 Water fog. Foam. Dry powder. Carbon dioxide (CO2).

media

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

media

Protection of firefighters

Protective equipment and precautions for

firefighters

Fire fighting

equipment/instructions

Hazardous combustion

products

Wear suitable protective equipment.

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

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. 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.

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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

US	ACGIH	Threshold	I imit	Values
UJ.	ACGIII	IIII CSHUIU		values

Components	Туре	Value	Form	
Paraffin Oils (petroleum),	TWA	5 mg/m3	Inhalable fraction.	
Catalytic Dewaxed Light				

(64742-71-8)

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

Components	Туре	Value	Form
Distillates (petroleum), Solvent-dewaxed Heavy Paraffinic (64742-65-0)	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.

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 stateLiquid.FormLiquid.

ColorNot available.OdorNot available.Odor thresholdNot available.pHNot available.Vapor pressureNot available.Density883 kg/m³Vapor densityNot available.

Boiling point $> 564.8 \, ^{\circ}\text{F} \, (> 296 \, ^{\circ}\text{C})$

Melting point/Freezing pointNot available.Solubility (water)NegligibleSolubility (other)OilSpecific gravity0.88

Relative density Not available.

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Flash point 381.2 °F (194 °C) Pensky-Martens Closed Cup

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Flammability limits in air, upper, % by volume

Not available.

Flammability limits in air,

lower, % by volume

Not available.

500 °F (260 °C) estimated

147.48 cSt ASTM D445

Auto-ignition temperature

0.84 % estimated

Percent volatile 0.08 % estimated

Other data

products

Viscosity

VOC

Flammability class Combustible IIIB estimated

Viscosity temperature 40

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

Nitrogen oxides (NOx). At thermal decomposition temperatures, carbon monoxide and carbon

dioxide.

11. Toxicological Information

Toxicological data

Product Test Results

V-Twin Mineral Engine Oil 20W-50 (Mixture)

Acute Oral LD50 Rat: 2364.07 g/kg estimated

Local effectsComponents 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), Solvent-refined Heavy Paraffinic MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, PURE, HIGHLY AND SEVERELY REFINED, INHALABLE

FRACTION (CAS 64741-88-4)

Paraffin Oils (petroleum), Catalytic Dewaxed Light MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, PURE, HIGHLY AND SEVERELY REFINED, INHALABLE

FRACTION (CAS 64742-71-8)

V-Twin Mineral Engine Oil 20W-50 (Mixture)

A4 Not classifiable as a human carcinogen.

A4 Not classifiable as a human carcinogen.

12. Ecological Information

Ecotoxicological data

Product Test Results

LOSO Siele 4400 04 man/ 07 le come estimate d

LC50 Fish: 4102.84 mg/l 96 hours estimated

EC50 Daphnia: 1158.39 mg/l 48 hours estimated

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

Environmental effectsAn environmental hazard cannot be excluded in the event of unprofessional handling or disposal

Persistence and N

Not available.

degradability

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

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.

CERCLA/SARA Hazardous Substances - Not applicable.

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

Nο

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)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

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

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

US - Pennsylvania RTK - Hazardous Substances: Listed substance

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

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Yes

Yes

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

16. Other Information

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

HMIS® ratings Health: 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: Skin contact First Aid Measures: Inhalation First Aid Measures: General advice

Accidental Release Measures: Personal precautions

Handling and Storage: Handling Handling and Storage: Storage

Exposure Controls / Personal Protection: Respiratory protection

Exposure Controls / Personal Protection: General hygiene considerations

Physical & Chemical Properties: Appearance Physical & Chemical Properties: Color Physical & Chemical Properties: Odor

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