



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** Bel-Ray 2T Mineral Engine Oil  
**Product Code** 99010  
**MSDS Number** 6401  
**Version #** 1.0  
**Revision date** 06-12-2010  
**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 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.

**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

Hazardous components	CAS #	Percent
STODDARD SOLVENT	8052-41-3	2.5 - 10
Non-hazardous components	CAS #	Percent
Interchangeable base oils, one or more: 64741-88-4, 64742-52-5, 64742-01-4		>= 80

## 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.

**Ingestion**

Rinse mouth. Do not induce vomiting. If ingestion of a large amount does occur, call a poison control center immediately. Never give liquid to an unconscious person.

**Notes to physician**

Symptoms may be delayed.

**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.

**Hazardous combustion products**

May include oxides of nitrogen. 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). Use water spray to reduce vapors or divert vapor cloud drift.

**Methods for cleaning up**

Should not be released into the environment. Dike far ahead of spill for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). 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**

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****Type****Value****Form**

Interchangeable base oils, one or more: 64741-88-4, 64742-52-5, 64742-01-4

STEL

10.0000 mg/m3

Mist.

STODDARD SOLVENT (8052-41-3)

TWA

5.0000 mg/m3

Mist.

TWA

100.0000 ppm

**U.S. - OSHA****Components****Type****Value****Form**

Interchangeable base oils, one or more: 64741-88-4, 64742-52-5, 64742-01-4

PEL

500.0000 ppm

5.0000 mg/m3

Mist.

Components	Type	Value	Form
STODDARD SOLVENT (8052-41-3)	TWA	2000.0000 mg/m3	Mist.
		5.0000 mg/m3	
		400.0000 ppm	
		1600.0000 mg/m3	
	PEL	2900.0000 mg/m3	
		500.0000 ppm	
		100.0000 ppm	
	TWA	525.0000 mg/m3	

**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** 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

<b>Appearance</b>	Oily.
<b>Color</b>	Dark blue
<b>Odor</b>	Petroleum
<b>Odor threshold</b>	Not available.
<b>Physical state</b>	Liquid
<b>Form</b>	Liquid.
<b>pH</b>	Not available.
<b>Melting point/Freezing point</b>	-94 °F (-70 °C) estimated / -94 °F (-70 °C) estimated
<b>Boiling point</b>	318.2 °F (159 °C) estimated
<b>Flash point</b>	163.4 °F (73 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not available.
<b>Vapor pressure</b>	2.8734 hPa estimated
<b>Density</b>	876.3 kg/m <sup>3</sup>
<b>Vapor density</b>	Not available.
<b>Specific gravity</b>	0.8763
<b>Relative density</b>	Not available.
<b>Solubility (water)</b>	Negligible
<b>Solubility (other)</b>	Oil Solvents
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	500 °F (260 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>VOC</b>	8 %
<b>Viscosity</b>	58.57 cSt @ 104 °F (40 °C)

Percent volatile 0.036 % estimated

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Risk of ignition. Material is stable under normal conditions.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Irritants. Nitrogen oxides (NOx). At thermal decomposition temperatures, carbon monoxide and carbon dioxide.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.

## 11. Toxicological Information

### Toxicological data

Product	Test Results
Bel-Ray 2T Mineral Engine Oil (Mixture)	Acute Dermal LD50 Rabbit: 2170 mg/kg estimated

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

<b>Local effects</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Contact with eyes may cause irritation. May cause skin irritation.
<b>Chronic effects</b>	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.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
STODDARD SOLVENT (CAS 8052-41-3)	3 Not classifiable as to carcinogenicity to humans.
<b>Neurological effects</b>	Hazardous by OSHA criteria.
<b>Further information</b>	Symptoms may be delayed.

## 12. Ecological Information

### Ecotoxicological data

Product	Test Results
Bel-Ray 2T Mineral Engine Oil (Mixture)	EC50 Daphnia: 9241 mg/l 48.00 hours estimated LC50 Fish: 120 mg/l 96.00 hours estimated

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

<b>Ecotoxicity</b>	Contains a substance which causes risk of hazardous effects to the environment.
<b>Environmental effects</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
<b>Persistence and degradability</b>	Not available.

## 13. Disposal Considerations

<b>Disposal instructions</b>	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.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.

## 14. Transport Information

### DOT

#### Basic shipping requirements:

<b>UN number</b>	NA1993
<b>Proper shipping name</b>	Combustible liquid, n.o.s. (STODDARD SOLVENT)
<b>Hazard class</b>	Comb liq
<b>Subsidiary hazard class</b>	None
<b>Packing group</b>	III

**Additional information:****Special provisions** IB3, T1, T4, TP1**Basic shipping requirements:****Labels required** None**Additional information:****Packaging exceptions** 150**Packaging non bulk** 203**Packaging bulk** 241**ERG number** 128**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**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
New Zealand	New Zealand Inventory	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** WARNING: This product contains a chemical known to the State of California to cause cancer.**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**ETHYLBENZENE (CAS 100-41-4) Listed: June 11, 2004 Carcinogenic.  
NAPHTHALENE (CAS 91-20-3) Listed: April 19, 2002 Carcinogenic.**US - Pennsylvania RTK - Hazardous Substances: Listed substance**

STODDARD SOLVENT (CAS 8052-41-3) Listed.

**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

**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**

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