



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name Bel-Ray EXS Syn Ester 4T E/O 10W-40
Product Code 99161
Version # 1.0
Revision date 01-07-2011
Manufacturer information Bel-Ray Company, Inc.
P.O. Box 526
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 WARNING!
Harmful if inhaled or swallowed. May cause skin and eye irritation.

OSHA regulatory status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential health effects

Routes of exposure Eye contact. Skin contact. Ingestion.

Eyes May cause temporary eye irritation.

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

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard. Inhalation of processing fumes may be harmful.

Ingestion Harmful if swallowed. May cause temporary irritation of the throat, stomach, and gastrointestinal tract. Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

Target organs Eyes. Skin. Heart and cardiovascular system.

Chronic effects Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Inorganic antimony: Chronic over exposure to inorganic antimony may cause damage to heart, blood, and other organs.

Potential environmental effects The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Considering the size of the packaging, the risk is regarded as minimal.

3. Composition / Information on Ingredients

Components	CAS #	Percent
SYNTHETIC BASE OIL	MIXTURE	75 - 85
ANTIMONY, TRIS(DIPENTYLCARBAMODITHIOATO)	15890-25-2	< 1

4. First Aid Measures

First aid procedures

Eye contact Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

Skin contact Wash skin with soap and water. Get medical attention if symptoms occur.

Inhalation Not likely, due to the form of the product. If symptoms are experienced, remove source of contamination or move victim to fresh air.

Ingestion Rinse mouth thoroughly. Get medical attention if any discomfort continues. If ingestion of a large amount does occur, call a poison control center immediately.

Notes to physician	This product is not expected to produce adverse effects under normal conditions of use and appropriate personal hygiene. Treat symptomatically.
General advice	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire Fighting Measures

Flammable properties	This product is not flammable. May burn, but does not ignite readily.
Extinguishing media	
Suitable extinguishing media	Water. Water spray. Carbon dioxide (CO2). Dry chemical. Foam.
Unsuitable extinguishing media	None known.
Protection of firefighters	
Protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire fighting equipment/instructions	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Move containers from fire area if you can do so without risk. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
Specific methods	In the event of fire and/or explosion do not breathe fumes.
Hazardous combustion products	Carbon monoxide and carbon dioxide. Nitrogen oxides (NOx). Sulfur oxides. Antimony and antimony compounds.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment	Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Collect spillage. Prevent entry into waterways, sewer, basements or confined areas.
Methods for cleaning up	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Do not allow material to contaminate ground water system.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling	Wear personal protective equipment. Avoid contact with eyes and prolonged or repeated contact with skin. Wash thoroughly after handling.
Storage	Keep container tightly closed. Keep away from food, drink and animal feedingstuffs. Keep out of reach of children.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components

	Type	Value
ANTIMONY, TRIS(DIPENTYLCARBAMODITHIOATO) (15890-25-2)	TWA	0.5 mg/m3

U.S. - OSHA

Components

	Type	Value	Form
ANTIMONY, TRIS(DIPENTYLCARBAMODITHIOATO) (15890-25-2)	PEL	0.5 mg/m3	
SYNTHETIC BASE OIL (MIXTURE)	PEL	5 mg/m3	Mist.

Engineering controls	Provide adequate general and local exhaust ventilation.
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Personal protective equipment

Eye / face protection	Wear approved safety goggles.
Skin protection	Wear suitable protective clothing and gloves.
Respiratory protection	Under normal conditions, respirator is not normally required. If mist is generated (heating, spraying) and engineering controls are not sufficient, wear approved organic vapor respirator suitable for oil mist.
General hygiene considerations	Provide eyewash station and safety shower. When using, do not eat, drink or smoke. Avoid contact with eyes. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Liquid.
Color	Amber.
Odor	Petroleum
Odor threshold	Not available.
Physical state	Liquid
Form	Liquid.
pH	Not available.
Melting point/Freezing point	Not available.
Boiling point	> 564.8 °F (> 296 °C)
Flash point	384.8 °F (196 °C) Pensky-Martens Closed Cup
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Density	862 kg/m3
Vapor density	Not available.
Specific gravity	0.86
Relative density	Not available.
Solubility (water)	Insoluble.
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	Not available.
Viscosity	13 - 15.5 cSt @ 212 °F (100 °C)

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Avoid high temperatures.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides. Antimony.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Components	Test Results
ANTIMONY, TRIS(DIPENTYLCARBAMODITHIOATO) (15890-25-2)	Acute Dermal LD50 Rabbit: > 16000 mg/kg

Components	Test Results
ANTIMONY, TRIS(DIPENTYLCARBAMODITHIOATO) (15890-25-2)	Acute Oral LD50 Rat: > 16000 mg/kg
Sensitization	May cause allergic skin disorders in sensitive individuals.
Acute effects	Harmful if inhaled or swallowed.
Local effects	May irritate eyes and skin.
Chronic effects	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Inorganic antimony: Chronic over exposure to inorganic antimony may cause damage to heart, blood, and other organs.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

12. Ecological Information

Ecotoxicity	This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.
Environmental effects	No data available for this product. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence and degradability	Not available.

13. Disposal Considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.
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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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US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

ANTIMONY, TRIS(DIPENTYLCARBAMODITHIOATO) (CAS 15890-25-2) 1.0 % N010

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

ANTIMONY, 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
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Section 302 extremely hazardous substance	No
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Section 311 hazardous chemical	No
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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
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

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

ANTIMONY, TRIS(DIPENTYLCARBAMODITHIOATO) (CAS 500 LBS
15890-25-2)

US - Pennsylvania RTK - Hazardous Substances: Listed substance

SYNTHETIC BASE OIL (CAS MIXTURE) Listed.

16. Other Information

HMIS® ratings

Health: 2*
Flammability: 1
Physical hazard: 0

NFPA ratings

Health: 2
Flammability: 1
Instability: 0

Issue date

01-07-2011