



MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Material name Big Twin Transmission Oil
Product code 96900
SDS Number 6973
Recommended use GL-5 Gear Oil
Version No. 3.0
Revision date 11-November-2014
Manufacturer

Bel-Ray Company, LLC
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United States of America
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CHEMTREC: 800-424-9300 (USA)
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CHEMTREC: 1800 069 100 (AUS)

2. HAZARDS IDENTIFICATION

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Components	CAS #	Percent
Xylene (all Isomers)	1330-20-7	< 10
Other components below reportable levels		> 60

Composition comments IP 346: < 3.0% DMSO extract for all base oil substances.

4. FIRST-AID MEASURES

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact Rinse with water. Get medical attention if irritation develops and persists.
Ingestion Rinse mouth. Do not induce vomiting. If ingestion of a large amount does occur, call a poison control centre immediately. Never give liquid to an unconscious person.
General advice Call a physician if symptoms develop or persist.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).
Extinguishing media which must not be used for safety reasons Water. Do not use water jet as an extinguisher, as this will spread the fire.
Hazchem Code None
Hazardous combustion products Carbon monoxide and carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions In case of spills, beware of slippery floors and surfaces.
Environmental precautions Prevent further leakage or spillage if safe to do so.
Containment procedures Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Methods for cleaning up

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.

7. HANDLING AND STORAGE**Handling**

Use care in handling/storage.

Storage

Room temperature - normal conditions. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Occupational exposure limits****US. ACGIH Threshold Limit Values**

Components	Type	Value
Xylene (all Isomers) (1330-20-7)	STEL	150 ppm
	TWA	100 ppm

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value
Xylene (all Isomers) (1330-20-7)	STEL	655 mg/m3
	TWA	150 ppm
		350 mg/m3
		80 ppm

Recommended monitoring procedures

Additional exposure data Not available.

Engineering measures

General ventilation normally adequate.

Personal protective equipment

Respiratory protection No personal respiratory protective equipment normally required.

Hand protection Not normally needed.

Eye protection Not normally needed.

Skin and body protection Normal work clothing (long sleeved shirts and long pants) is recommended.

General Applicable for industrial settings only: Use personal protective equipment as required.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practices.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Oily.
Oily.

Physical state

Liquid.

Form

Liquid.
Liquid.

Colour

Red.
Red.

Odour

Strong. Petroleum
Strong. Petroleum

Odour threshold

Not available.

pH

Not available.

Vapour pressure

Not available.

Density

905.00 kg/m3

Vapour density

Not available.

Boiling point

343 °C (649.4 °F)

Melting point/freezing point

Not available.

Solubility (water)

Negligible

Solubility (other)	Oil
Specific gravity	0.905
Flash point	232.00 °C (449.60 °F) 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	260 °C (500 °F) estimated
VOC	< 1 %
Viscosity	346.5 cSt ASTM D445
Percent volatile	0.0032 % estimated

Other data

Flammability class	Combustible IIIB estimated
Flash point class	Combustible IIIB
Kinematic viscosity	418 cSt ASTM D445
Kinematic viscosity temp	40 °C (104 °F)
Viscosity temperature	40 °C (104 °F)

10. STABILITY AND REACTIVITY

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Avoid temperatures exceeding the flash point.
Materials to avoid	Strong oxidizing agents.
Hazardous decomposition products	Toxic gas. At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Toxicological data

Product	Species	Test results
Big Twin Transmission Oil (Mixture)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2094.459 mg/kg, estimated
<i>Oral</i>		
LD50	Rat	2094.4202 mg/kg, estimated
Components	Species	Test results
Xylene (all Isomers) (1330-20-7)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 43 g/kg
<i>Inhalation</i>		
LC50	Mouse	3907 mg/l, 6 Hours
	Rat	6350 mg/l, 4 Hours
LCL0	Rat	8000 mg/l, 4 Hours
<i>Oral</i>		
LD50	Mouse	1590 mg/kg
	Rat	3523 - 8600 mg/kg
<i>Other</i>		
LD50	Rat	3.8 mg/kg

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

Routes of exposure	Not applicable.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

XYLENES (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.
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Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductivity	Not classified.
Epidemiology	No epidemiological data is available for this product.
Local effects	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Contact with eyes may cause irritation. May cause skin irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicological data

Components	Species		Test results
Xylene (all Isomers) (1330-20-7)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.661 - 4.093 mg/l, 96 hours
* Estimates for product may be based on additional component data not shown.			
Ecotoxicity	Not expected to be harmful to aquatic organisms.		
Mobility	This product is miscible in water.		
Bioaccumulation			
Bioaccumulative potential			
Octanol/water partition coefficient log Kow			
Xylene (all Isomers)			3.12 - 3.2

13. DISPOSAL CONSIDERATIONS

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

ADG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Hazchem Code	None
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15. REGULATORY INFORMATION

National regulations	This Material Safety Data Sheet was prepared in accordance with the Australia National Code of Practice for the Preparation of Material Safety Data Sheets (NOHSC: 2011.) No poison schedule number allocated.
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Australia HVIC: Listed substance

Xylene (all Isomers) (CAS 1330-20-7)	Listed.
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Australia Medicines & Poisons Schedule 5: Use/Concentration/Exceptions

Xylene (all Isomers) (CAS 1330-20-7)	Exception may apply, see the regulation for relevance.
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Australia Medicines & Poisons Schedule 6: Use/Concentration/Exceptions

Xylene (all Isomers) (CAS 1330-20-7)	Exception may apply, see the regulation for relevance.
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Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
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

Country(s) or region	Inventory name	On inventory (yes/no)*
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)		

16. OTHER INFORMATION

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	11-January-2012
Revision date	11-November-2014
This data sheet contains changes from the previous version in section(s):	IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING Composition/Information on Ingredients: Ingredients COMPOSITION/INFORMATION ON INGREDIENTS: Composition comments Physical & Chemical Properties: Multiple Properties PHYSICAL AND CHEMICAL PROPERTIES: Odour