



Material Safety Data Sheet
EnviroLogic® CO-100 Castor Oil Based Hydraulic Fluid

Section 1 Chemical Product and Company Information

Terresolve Technologies Ltd.
35585 Curtis Blvd.
Eastlake, Ohio 44095
Phone: 440-951-8633
Fax: 440-951-4341

PRODUCT TRADE NAME: EnviroLogic® CO-100
CAS NO: Not applicable for mixtures.
SYNONYMS: None.
GENERIC/CHEMICAL NAME: Mixture.
PRODUCT TYPE: Hydraulic fluid
PREPARATION/REVISION DATE: 06/01/01
TRANSPORTATION EMERGENCY PH NO: 1-440-951-8633

Section 2 Composition/Information On Ingredients

NAME	CAS#	%WT
Castor oil		>90
Oxidation inhibitor (Diphenyl amine)	122-39-4	<10
Hydrolytic stability agent (Carbodiimide)	2162-74-5	<10

This material has no known hazards under applicable laws.

Section 3 Hazards Identification

PRINCIPAL HAZARDS: This material has no known hazards.

See Section 11 for complete health hazard information.

Section 4 First Aid Measures

ORAL: DO NOT INDUCE VOMITING. If conscious, give 2 glasses of water. Get immediate medical attention.

EYE: Flush with water at least 15 minutes. Get medical attention if eye irritation develops or persists.

SKIN: Wash with soap and water. Get medical attention if irritation develops. Launder contaminated clothing before reuse.

INHALATION: Remove exposed person to fresh air if adverse effects are observed.



ADDITIONAL: Note to physician: Treat symptomatically.

Section 5 Firefighting Measures

FLASH POINT (Typical): >250 Deg C (COC)

UPPER FLAMMABLE LIMIT: Not Determined.

LOWER FLAMMABLE LIMIT: Not Determined.

EXTINGUISHING MEDIA: CO₂, dry chemical, or foam. Water can be used to cool and protect exposed material.

SPECIAL FIREFIGHTING PROCEDURES: Recommend wearing self-contained breathing apparatus. Water may cause splattering. Material will float on water.

UNUSUAL FIRE & EXPLOSION HAZARDS: None expected.

AUTOIGNITION TEMPERATURE: Not Determined.

EXPLOSION DATA: Material does not have explosive properties.

Section 6 Accidental Release Measures

SPILL PROCEDURES: Personal Protective Equipment should be worn, see Personal Protection Section for PPE recommendations. Ventilate area if spilled in confined space or other poorly ventilated areas. Prevent entry into sewers and waterways. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Check under Transportation and Labeling (DOT/CERCLA) and Other Regulatory Information Section (SARA) for hazardous substances to determine regulatory reporting requirements for spills.

Section 7 Handling and Storage

HANDLING PROCEDURES: Keep containers closed when not in use. Wash thoroughly after handling. Empty container contains product residue which may exhibit hazards of product.

STORAGE PROCEDURES: No special storage precautions required.

Section 8 Exposure Controls/Personal Protection

VENTILATION PROCEDURE: Use with adequate ventilation.

EYE PROTECTION: Safety Glasses.

RESPIRATORY PROTECTION: Under normal use conditions, respirator is not usually required. Use NIOSH/MSHA approved disposable dust/mist mask if the recommended exposure limit is exceeded.



CLOTHING RECOMMENDATION: Long sleeve shirt is recommended.

Section 9 Physical And Chemical Properties

VAPOR PRESSURE: Not Determined.
PH: Not Determined.
SPECIFIC GRAVITY: 0.92 at 15.6 Deg C
WATER SOLUBILITY: Insoluble.
PERCENT VOLATILE: Unknown.
VAPOR DENSITY: Not Determined.
EVAPORATION RATE: Not Determined.
ODOR: Mild
APPEARANCE: Yellow liquid
VISCOSITY: Typically 225 centistokes at 40 Deg C
ODOR THRESHOLD: Unknown.
BOILING POINT : Not Determined.
FREEZING POINT: Not Determined.
MOLECULAR WEIGHT: Not Determined

Section 10 Stability And Reactivity

STABILITY: Material is normally stable at moderately elevated temperatures and pressures.
INCOMPATIBILITY: Oxidizing agents.
POLYMERIZATION: Will not occur.
THERMAL DECOMPOSITION: Smoke, carbon monoxide, aldehydes and other products of incomplete combustion.

Section 11 Toxicological Information

ORAL TOXICITY: The LD50 in rats is > 5000 mg/kg. Based on data from components or similar materials.
EYE IRRITATION: May cause mild eye irritation if exposure occurs. Based on data from similar components or similar materials.
SKIN IRRITATION: Not expected to be a primary skin irritant. Based on data

DERMAL TOXICITY:	from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, defatting and cracking of the skin. The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.
INHALATION TOXICITY:	No data available to indicate product or components may be a toxic inhalation hazard.
RESPIRATORY IRRITATION:	If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract similar to that observed with mineral oil. Based on data from components or similar materials. Under good industrial hygiene practices where all exposure limits are observed, respiratory irritation should not be a problem.
DERMAL SENSITIZATION:	No data available to indicate product may be a skin sensitizer.
INHALATION SENSITIZATION:	No data available to indicate product may be a respiratory sensitizers.
CHRONIC TOXICITY:	No product or component is present that would cause or be considered a chronic health hazard.
CARCINOGENICITY:	Contains no component at greater than 0.1% that may present a carcinogenic hazard.
MUTAGENICITY:	No product or any components present at greater than 0.1% are mutagenic or genotoxic.
REPRODUCTIVE TOXICITY:	No product or components present at greater than 0.1% that may cause reproductive toxicity.
TERATOGENICITY:	No product or any contained at greater than 0.1% may cause birth defects.
OTHER:	No other health hazards known.
EXPOSURE LIMITS:	EXPOSURE LIMITS: Contains vegetable oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH STEL of 10 mg per cubic meter.

Section	12	Ecological Information
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FRESHWATER FISH TOXICITY:	Practically non-toxic
FRESHWATER INVERTEBRATES TOXICITY:	Practically non-toxic
ENVIRONMENTAL FATE	No data available.

**Section 13 Disposal Considerations**

WASTE DISPOSAL: Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA. Waste management should be in compliance with federal, state, and local laws.

Section 14 Transport Information

U.S.DOT BULK SHIPPING DESCRIPTION: Not applicable.

U.S.DOT NON-BULK SHIPPING DESCRIPTION: Not applicable.

IMDG SHIPPING DESCRIPTION: Not applicable.

ICAO SHIPPING DESCRIPTION: Not applicable.

ADR/RID HAZARD CLASS: Not applicable.

Section 15 Regulatory Information

U.S. TSCA INVENTORY: All components of this material are on the US TSCA Inventory.

SARA EXT. HAZ. SUBST.: This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.

SARA SECTION 313: This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.

CERCLA HAZARDOUS SUBSTANCES: None known.

U.S. FUEL REGISTRATION: Not applicable.

U.S. DEPT. OF AGRICULTURE: The components of this product meet USDA H2 requirements.

FDA APPROVAL: Not applicable.

EEC EINECS: All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC.

JAPAN MITI: All components are in compliance with the Chemical Substances Control Law of Japan.

AUSTRALIA: All components are in compliance with chemical notification requirements in Australia.

CANADA: All components are in compliance with the Canadian Environmental



Protection Act.

CANADIAN FUEL REGISTRATION: Not applicable.

AUSTRIA: All components are in compliance with the Austrian Chemical Laws.

SWITZERLAND: All components are in compliance with the Environmentally Hazardous substances Ordinance in Switzerland.

Section	16	Other Information
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NFPA CODE:	Health: 0	Fire: 1	Reactivity: 0
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HMIS CODE:	Health: 0	Fire: 1	Reactivity: 0
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PRECAUTIONARY LABELS: This material has no known hazards.

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