

# Material Safety Data Sheet

## GreensCare 32

### Section 1 Chemical Product and Company Information

Manufactured exclusively for Jacobsen, A Textron Company, by

Terresolve Technologies Ltd.  
35585 Curtis Blvd.  
Eastlake, OH 44095  
[www.terresolve.com](http://www.terresolve.com)  
Phone: (440) 951-8633  
FAX: (440) 951-4341

PRODUCT TRADE NAME:	GreensCare 32
CAS NO:	Not applicable for mixtures.
SYNONYMS:	None.
GENERIC/CHEMICAL NAME:	Mixture.
PRODUCT TYPE:	Biodegradable Hydraulic Fluid
PREPARATION/REVISION DATE:	03/10/08
TRANSPORTATION EMERGENCY PH NO:	1-800-661-3558

### Section 2 Composition/Information On Ingredients

NAME  
Natural triglyceride base oil  
Biodegradable hydrocarbon fluidity modifier  
Proprietary biodegradable ashless hydraulic additive  
Blue Dye

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):	400 °F (205°C) Typical (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:	Toxic fumes, gases or vapors may evolve on burning.
AUTOIGNITION TEMPERATURE:	Not Determined.
EXPLOSION DATA:	Material does not have explosive properties.

**Section 6 Accidental Release Measures**

SPILL PROCEDURES:	Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Ventilate area if spilled in confined space or other poorly ventilated areas. 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.
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**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.
GLOVES PROTECTION:	Use nitrile or neoprene gloves.
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:	0.89 at 15.6 Deg C
WATER SOLUBILITY:	Insoluble.
PERCENT VOLATILE:	Unknown.
VAPOR DENSITY:	Not Determined.
EVAPORATION RATE:	Not Determined.
ODOR:	Mild
APPEARANCE:	Clear blue liquid
VISCOSITY:	32 Centistokes at 40 Deg C (Typical)
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:	Not expected to cause eye irritation. Based on data from components or similar materials.
SKIN IRRITATION:	Not expected to be a primary skin irritant. Based on data 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.
DERMAL TOXICITY:	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 or components may be a skin sensitizer.
INHALATION SENSITIZATION:	No data available to indicate product or components may be respiratory sensitizers.
CHRONIC TOXICITY:	No data available to indicate product or components present at greater than 1% are chronic health hazards.
CARCINOGENICITY:	No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.
MUTAGENICITY:	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

REPRODUCTIVE TOXICITY: No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

TERATOGENICITY: No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

OTHER: No other health hazards known.

EXPOSURE LIMITS: EXPOSURE LIMITS: Contains natural ester base 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:	Fathead minnow, 96h LC50, ppm EPA Test Method 797.1400	>10,000
FRESHWATER INVERTEBRATES TOXICITY:	Daphnia magna, 48h, EC50, ppm EPA Test Method 797.1300	>10,000
ALGAE TOXICITY:	Algae EC50, ppm EPA Test Method 797.1050	100 – 1000
BACTERIA TOXICITY:	Sludge respiration inhibition, EC50, ppm	>10,000
ENVIRONMENTAL FATE:	Product shows a biodegradability of >94% as measured by CEC L-33 test procedure. Based on actual data.	

Section	13	Disposal Considerations
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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.	
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Section	14	Transport Information
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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
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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.
CAL. PROP. 65:	This product does not contain chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components.
U.S. FUEL REGISTRATION:	Not applicable.
U.S. DEPT. OF AGRICULTURE:	This product has not been filed with the USDA to support H2 approvals.
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.
AUSTRIA:	All components are in compliance with the Austrian Chemical Laws.

Section	16	Other Information	
NFPA CODE:	Health: 1	Fire: 1	Reactivity: 0
HMIS CODE:	Health: 1	Fire: 1	Reactivity: 0

PRECAUTIONARY LABELS: This material has no known hazards.

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