



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	ecoAgra, eA300
Version	# 01
Issue date	07-20-2012
Revision date - Supersedes date -	
Chemical description	BIOBASED ingredients
CAS # Mixture	
Product use	Applied to Field Crops, Vegetables, Fruits, Greenhouse Plants, Trees, Shrubs, Grass House Plants and Produce Washing.
Manufacturer/Supplier	ecoSolv Technologies LLC 63 Klema Drive East, Reynoldsburg, Ohio 43068 info@ecosolv.com Contact Person: Robert L. Davis or Alan Parker
Telephone number	757-436-9266
Emergency	Emergency Telephone Number 757-436-9266

2. Hazards Identification

Physical state	Liquid.
Appearance	Slightly viscous, clear yellow liquid.
Emergency overview	Health injuries are not known or expected under normal use.
OSHA regulatory status	This product is not hazardous according to OSHA 29CFR 1910.1200.
Potential health effects	
Routes of exposure	Eye contact. Inhalation.
Eyes	May cause eye irritation on direct contact.
Skin	Prolonged skin contact may cause irritation.
Inhalation	Inhalation of high concentrations may result in transient irritation and coughing.
Ingestion	Ingestion may cause irritation and malaise.
Target organs	Eyes. Skin. Respiratory system.
Chronic effects	Prolonged contact may cause dryness of the skin.
Signs and symptoms	Irritant effects. Irritation of eyes and mucous membranes.
Potential environmental effects	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

Composition comments	Product Ingredients: Made from renewable resources. Non-ionic surfactant, corn, soy, tall oil fatty acids, organic alcohol and water.
-----------------------------	---

4. First Aid Measures

First aid procedures	
Eye contact	Flush thoroughly with water. If irritation occurs, get medical assistance.
Skin contact	Wash with soap and water. Get medical attention if irritation develops and persists.
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Ingestion	Not expected to be harmful in amounts likely to be ingested by accident.
Notes to physician	Treat symptomatically.
General advice	Get medical attention if any discomfort develops.

5. Fire Fighting Measures

Flammable properties	The product is non-combustible.
Extinguishing media	
Suitable extinguishing media	Dry chemical, foam, carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Protection of firefighters	
Specific hazards arising from the chemical	Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterized.
Protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do it without risk. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.



6. Accidental Release Measures

Personal precautions	Ensure adequate ventilation. For personal protection, see section 8 of the MSDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Small Spills: Absorb spillage with non-combustible, absorbent material. Wash area with soap and water.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling	Avoid contact with eyes and prolonged skin contact. Observe good industrial hygiene practices.
Storage	Store in a cool and well-ventilated place. Store away from incompatible materials.

8. Exposure Controls / Personal Protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Engineering controls	Provide adequate ventilation and minimize the risk of inhalation of vapors and mists.
Personal protective equipment	
Eye / face protection	If risk of splashing, wear safety goggles or face shield.
Skin protection	Wear protective gloves. Rubber, neoprene or PVC gloves are recommended. Suitable gloves can be recommended by the glove supplier. Wear suitable protective clothing.
Respiratory protection	No personal respiratory protective equipment normally required. Seek advice from local supervisor.
General hygiene considerations	Wash hands after handling. Handle in accordance with good industrial hygiene and safety practice. Follow up on any medical surveillance requirements.

9. Physical & Chemical Properties

Appearance	Slightly viscous, clear yellow liquid.
Physical state	Liquid.
Form	Slightly viscous.
Color	Clear yellow.
Odor	Faint.
Odor threshold	Not available.
pH	9.7
Vapor pressure	Not available.
Vapor density	Not available.
Boiling point	214.4 °F (101.3 °C)
Melting point/Freezing point	Not available.
Solubility (water)	Complete.
Specific gravity	Not available.
Flash point	> 200 °F (> 93.3 °C)
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.
VOC	172 g/l
Bulk density	Not applicable.
Other data	
Explosive properties	Not explosive.
Flash point class	Combustible III B
Oxidizing properties	Not oxidizing.

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	High temperatures. Exposure to light. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Nitrogen oxides.
Possibility of hazardous	



reactions Hazardous reactions do not occur.

11. Toxicological Information

Sensitization	No test data available for the product.
Acute effects	May form vapors or oil mists during mechanical action or at elevated temperatures which may be irritating to respiratory tract.
Local effects	Contact with eyes may cause irritation.
Chronic effects	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Carcinogenicity	Not classified by IARC, ACGIH, NTP or OSHA.
Epidemiology	No epidemiological data is available for this product.
Mutagenicity	There is no data to indicate that any component present at greater than 0.1% may present a risk.
Reproductive effects	Contains no ingredient listed as toxic to reproduction
Further information	No other specific acute or chronic health impact noted.

12. Ecological Information

Ecotoxicity	Oil spills are generally hazardous to the environment.
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Aquatic toxicity	Not expected to be harmful to aquatic organisms.
Persistence and degradability	The product is readily biodegradable.
Bioaccumulation / Accumulation	Not available.
Mobility in environmental media	The product is miscible with water. May spread in water systems.

13. Disposal Considerations

Waste codes	Not regulated.
Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations. Follow all applicable MARPOL requirements for disposal of waste, when transporting materials by vessel.

14. Transport Information

DOT	Not regulated as a hazardous material by DOT.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
TDG	Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations	This product is not known to be 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.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	Not regulated.
CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)	None
Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories	
Immediate Hazard -	No
Delayed Hazard -	No
Fire Hazard -	No
Pressure Hazard -	No
Reactivity Hazard -	No
Section 302 extremely hazardous substance (40CFR 355, Appendix A)	No
Section 311/312 (40 CFR 370)	No



Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)

Not controlled

Canadian regulations

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status

Non-controlled

Inventory status

Country(s) or region

Inventory name

On inventory (yes/no)*

Canada

Domestic Substances List (DSL)

Yes

Canada

Non-Domestic Substances List (NDSL)

No

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

Mexico regulations This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

16. Other Information

Other information

ACGIH: American Conference of Industrial Hygienists.
IARC: International Agency for Research on Cancer.
NTP: National Toxicology Program.
OSHA: Occupational Safety and Health Administration.
WHMIS: Workplace Hazardous Materials Information System.

HMIS® ratings

Health: 0

Flammability: 0

Physical hazard: 0

NFPA ratings

Health: 0

Flammability: 0

Instability: 0

Disclaimer: The information in the sheet was written based on the best knowledge and experience currently available