

MATERIAL SAFETY DATA SHEET

Green Cypress® EcoSpreader

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Issue Date: 12/09

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Product

Green Cypress® EcoSpreader

Common Name: Surfactant (Adjuvant).

Chemical Description: Siloxane polyalkyleneoxide copolymer and polyalkyleneoxide.

TSCA/CAS No.: This product is a mixture — there is no specific CAS number.

Manufactured For

Monterey AgResources

P. O. Box 35000

Fresno, CA 93745-5000

Emergency Phone Numbers

Emergency Telephone: DAYS: (559) 499-2100 EVES.: (559) 994-9144

CHEMTREC (24-Hour Emergency Number): (800) 424-9300

EPA National Response Center: (800) 424-8802

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SECTION 2. HAZARDOUS INGREDIENTS

CHEMICAL	CAS NO.	%	TLV OR PEL	RQ (lbs)
Siloxane polyalkyleneoxide copolymer	Trade secret	> 80%		
Polyalkylene oxide	Trade secret	< 20%		

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Straw colored liquid with moderate polyether odor. Aerosol harmful if inhaled. Vapor may cause blurring of vision. Repeated ingestion may cause damage to the liver, kidneys, thyroid, male and female reproductive system, and blood-forming system. Repeated inhalation of aerosol of the neat liquid may cause damage to the eyes, blood-forming system, kidneys, thymus, respiratory tract, and nasal cavity. Burning can produce carbon oxides, oxides of silicon, formaldehyde. Not D.O.T. regulated.

HEALTH: 2 REACTIVITY: 0 FLAMMABILITY: 1 ENVIRONMENT: 1
(0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme)

SECTION 4. FIRST AID

- If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a Poison Control Center or doctor for treatment advice.
- If swallowed: Call a Poison Control Center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a Poison Control Center or doctor. Do not give anything by mouth to an unconscious person.
- If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of soap and water for 15-20 minutes. Call a Poison Control Center or doctor for treatment advice.
- If inhaled: Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5. FIRE AND EXPLOSION HAZARDS

Flash Point:	143°C; 289°F.
Test Method:	ASTM D 93
LEL Flammable Limits:	Not available.
UEL Flammable Limits:	Not available.
Autoignition Temperature:	Not available.
Flammability Classification:	Nonflammable.
Known Hazardous Products of Combustion:	Carbon oxides, oxides of silicon, formaldehyde.
Properties that Initiate/Contribute to Intensity of Fire:	Not known.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	Not known.
Potential For Release of Flammable Vapors:	Not known.
Unusual Fire & Explosion Hazards:	Not known.
Extinguishing Media:	All standard extinguishing agents are suitable.
Special Firefighting Procedures:	Wear NIOSH/MSHA approved positive pressure, self-contained breathing apparatus with full face mask and full protective clothing. Avoid smoke inhalation. Contain any liquid runoff.

SECTION 6. SPILLS AND LEAKS

Containment:	Prevent product spillage from entering drinking water supplies or streams.
Clean Up:	Collect liquid or absorb onto absorbent material and package for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard.
Evacuation:	Not necessary.

SECTION 7. STORAGE AND HANDLING

Storage:	Keep away from children. Store in original container in a cool, well-ventilated, dry place. Do not store near food or feeds. Do not stack pallets more than two (2) high.
Transfer Equipment:	Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.
Work/Hygienic Practices:	Causes substantial but temporary eye injury. Harmful if swallowed or inhaled. Do not get in eyes or on clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Do not contaminate feed and foodstuffs.

SECTION 8. PERSONAL PROTECTIVE EQUIPMENT

Eyes:	Wear protective eyewear when mixing or handling concentrate. As a general rule, do not wear contact lenses when handling.
Skin:	Wear long sleeved shirt, long pants, shoes plus socks and chemical resistant gloves made of any waterproof material when mixing or handling concentrate.
Respiratory:	Not normally needed. If use generates an aerosol mist or respiratory irritation, use NIOSH-approved dust/mist respirator (such as 3M #8710).
Ventilation:	No TLV established. General room ventilation is expected to be satisfactory if handled at low temperatures or in covered equipment. Special, local ventilation is needed at points where vapors can be expected to escape to the workplace air.

SECTION 9. PHYSICAL AND CHEMICAL DATA

Appearance:	Straw colored liquid.
Odor:	Moderate polyether.
pH:	Not determined.
Vapor Pressure:	< 1 mm Hg at 20°C.
Vapor Density (Air = 1):	> 1.
Boiling Point:	Not determined.
Freezing Point:	-50°C (-58°F); pour point.
Water Solubility:	Dispersible.
Density:	8.36 lbs./gal.
Evaporation Rate (Butyl acetate = 1):	< 1.
Viscosity:	Not determined.
% Volatile:	Not determined.
Octanol/Water Partition Coefficient:	Not determined.
Saturated Vapor Concentration:	Not determined.

SECTION 10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions To Avoid:	None known.
Incompatibility:	None known.
Hazardous Decomposition Products:	Burning can produce carbon oxides, oxides of silicon, formaldehyde. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Acute overexposure to the product of combustion may result in irritation of the respiratory tract. This product contains methylpolysiloxanes which can generate formaldehyde at ~300°F (150°C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant and potential cancer hazard.
Hazardous Polymerization:	Will not occur.

SECTION 11. POTENTIAL HEALTH EFFECTSAcute Effects:

Eyes:	Liquid splashed into the eye causes discomfort, moderate redness of the conjunctivae, iridal inflammation, tear production. Injury to the cornea is not expected.
Skin:	Brief contact is not expected to produce irritation. Prolonged contact may results in minor irritation, transient local redness, swelling. Not a skin sensitizer, but contact may aggravate existing dermatitis. (LD ₅₀ > 2,000 mg/kg (rat)).
Ingestion:	No evidence of harmful effects from available information. Repeated overexposure may cause injury to the liver, kidney, thyroid, blood-forming system, male and female reproductive systems. (LD ₅₀ > 2,000 mg/kg (rat)).
Inhalation:	Harmful effects are not expected from static vapor at ambient temperature. Inhalation of an aerosol of the neat material within a confined space could result in respiratory distress and eye injury. Repeated overexposure may cause injury to the respiratory tract, eyes, nasal cavity, blood-forming system. (LC ₅₀ = 2 mg/l (rat); test results are based on analogy with a similar material (aerosol; neat). LC ₅₀ > 11.78 mg/l (rat); test results are based on analogy with a similar material (aerosol; 5% solution)).

Mutagenicity: This material was negative in a bacterial (Salmonella typhimurium/ Escherichia coli) reverse mutation assay.

Other: The following information is based on analogy with a similar material: This material was not mutagenic in three mammalian test systems including the Chinese Hamster Ovary (CHO)/HGPRT gene mutation assay, a micronucleus cytogenic assay in mice, and an in vitro mammalian cytogenic test. In a repeated skin application study with rats, this material caused moderate skin irritation which resolved during a post-application recovery period. There was no evidence for percutaneous cumulative or specific organ toxicity, and no effect on male or female reproductive systems. Findings from a 14-day dietary feeding study with rats show that high dosage repeated ingestion of this material causes reversible adverse effects on the male and female reproductive tracts. Additional effects seen include increased liver weight, altered blood cytology/chemistry, and thyroid enlargement (primarily hypertrophy, with some hyperplasia). Evidence of partial or complete recovery was found over a 28-day recovery period. Findings from a repeat 9-day aerosol inhalation toxicity study with rats show a no observable effect level (NOEL) of less than 0.025 mg/l. Symptoms of toxicity included rales, gasping, ocular opacity, prostration, hypothermia, reduced body weight gain and food consumption, changes in clinical pathology, decreased thymus weight, and microscopic lesions in the nasal cavity. There was no effect on the male or female reproductive systems. It is not anticipated that the use of aqueous dilutions of this product would result in this type of aerosol exposure.

SECTION 12.	ECOLOGICAL INFORMATION
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Algal/Lemna Growth Inhibition:	Not known.
Toxicity to Fish and Invertebrates:	Not known.
Toxicity to Plants:	Not known.
Toxicity in Birds:	Not known.

SECTION 13.	DISPOSAL
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Do not contaminate lakes, streams, ponds, estuaries, oceans or other waters by discharge of waste effluents or equipment washwaters. Dispose of waste effluents in accordance with state and local regulations. Also, chemical additions or other alterations of this product may invalidate any disposal information in this MSDS. Therefore, consult local waste regulators for proper disposal.

SECTION 14.	TRANSPORTATION
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D.O.T. Proper Shipping Description:	Not D.O.T. Regulated.
Other Shipping Information:	Adhesives, Adjuvants, Spreaders or Stickers, Liquid. NMFC Item 4612, LTL Class 60

SECTION 15.	REGULATORY INFORMATION
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CERCLA: None.

SARA TITLE III, Section 313 Toxic Chemicals: None.

PROPOSITION 65 (CA): None.

SECTION 16.	OTHER
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While the information contained herein is based on data considered accurate and was compiled to comply with the Federal Hazard Communication Standard and the California Hazardous Substances Information and Training Act, it is provided for guidance only. Monterey AgResources does not guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations; in so doing, user assumes all risk in use of the material. The information contained herein is not to be taken as a warranty or representation for which Monterey AgResources assumes legal responsibility.