

Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name: Tree Guard
Product Code: BUI/TREEGUARD
Effective Date: May 1, 2007

Hazardous Material Information System:

Health	1
Fire Hazard	1
Physical Hazard	0
Personal Protection	X

Manufacturer Information: Becker Underwood, Inc.
 801 Dayton Avenue
 Ames, Iowa 50010
 Information Phone: (515) 232-5907
 Emergency Phone: Chemtrec (800) 424-9300

Section 2. Hazard Identification

Hazardous Components		Occupational Exposure Limits		
Component	CAS Number	OSHA PEL	ACGIH TLV	Weight Percent
Denatonium Benzoate	3734-33-6	NA	NA	0.20%
Ammonium Sterate	Proprietary	NA	10 mg/m ³	0-5%

No reportable quantities of toxic chemical(s) subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372 are present

Emergency Overview: May cause respiratory tract, eye, and skin irritation.

Potential Acute Health Effects:

- Eyes:* Short term harmful effects are not expected. However, irritation may develop causing itching and redness.
- Skin:* Short term harmful effects are not expected. However, mild skin irritation may develop causing itching and redness.
- Inhalation:* Short term harmful effects are not expected. However, exposure to vapors or mist may cause coughing or wheezing when inhaled.
- Ingestion:* Not an intended route of exposure. Short term harmful effects are not expected. However, may upset the gastrointestinal tract and cause diarrhea. Unless advised otherwise, dilute with water or milk.

Section 3. Composition/Information on Ingredients

The composition of this material is a trade secret. Contains no other components or impurities which will influence the classification with regard to human and environmental risk assessment.

Section 4. First Aid Measures

- Eye Contact:** Immediately flush eyes with water for at least 15 minutes. Prolonged or repeated contact may result in mechanical irritation.
- Skin Contact:** Wash with soap and water.
- Inhalation:** Move to fresh air. Seek medical attention if irritation persists.
- Ingestion:** Seek medical attention.

Section 5. Fire Fighting Measures

Flash Point:	>200°F
Flammability of Product:	Not a fire or explosion hazard when stored under normal conditions.
Fire Fighting Media:	Foam, alcohol foam, CO ₂ , dry chemical, water fog
Protective Clothing:	This product is an aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a moderate fire hazard. No special procedures required besides standard fire fighting procedures.

Section 6. Accidental Release Measures

Clean-Up Procedures:	Collect spilled material with an inert absorbent such as sand or vermiculite. Place in properly labeled and closed container. Dispose of collected material according to federal, state, and local regulations. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not clean equipment or dispose of equipment wash waters in a way that will contaminate water resources or arable land.
Spills and Leaks:	Contain the spill or leak to prevent a discharges to surface streams or storm sewers. This material is a concentrated dye/pigment. Small quantities in contaminated water solutions will color large volumes.

Section 7. Handling and Storage

Handling:	Avoid breathing fumes. General mechanical ventilation can be expected to effectively remove and prevent build up of any vapor or mist generated from handling this product in a closed environment. Do not freeze. Protect eyes to prevent contact. Avoid prolong or repeated exposure to skin.
Storage:	Keep container in a dry place inaccessible to children and pets at temperatures above freezing. Keep containers sealed until ready for use.

Section 8. Exposure Control/Personal Protection

Engineering controls:	General mechanical ventilation can be expected to effectively remove and prevent build up of any vapor or mist generated from handling this product in a closed environment
Personal Protection:	
<i>Eyes:</i>	Wear safety glasses with side shields. Wear additional eye protection such as chemical goggles or face shield if splashing or spraying hazard exists. Have an eye wash station available.
<i>Body:</i>	To prevent skin contact use coveralls, apron, boots, or lab coat.
<i>Hands:</i>	Avoid skin contact by using chemically resistant gloves.
<i>Respiratory:</i>	No respiratory protection required under normal conditions of use. Use local exhaust to control excessive vapors/mists. If excessive vapors or mists are persist use appropriate NIOSH/MSHA approved organic vapor/mist respirator.
Other:	Open wounds or skin surface disruptions should be covered with a chemical resistant patch to minimize absorption risks. Clean clothing should be worn daily to avoid possible long-term build up of the product leading to chronic overexposure.

Section 9. Physical and Chemical Properties

Odor	Slight odor	Vapor Density	Heavier than air
Color	Milky White	Evaporation Rate	Slower than ether
Physical state	Liquid emulsion	Specific Gravity (H₂O = 1)	0.9-1.1 g/mL
pH	8.40-9.40	Solubility	Water soluble
Melting/Freezing Point	>200°F		

Section 10. Stability and Reactivity

Chemical Stability: This material is chemically stable under normal and storage and handling conditions.

Hazardous Decomposition: When involved in a fire, burning may evolve noxious fumes which may include carbon monoxide, carbon dioxide, nitrous oxides, acetic acid, or other toxic compounds depending on the chemical composition and combustion conditions. However, all of the water must be driven off first for this to occur.

Hazardous Polymerization: Is not known to occur.

Incompatibility (Materials to Avoid): Long term storage in direct contact with reactive metals such as aluminum, zinc, copper, nickel, magnesium, etc. Other materials to avoid include strong oxidizing agents.

Section 11. Toxicological Information

Chronic Toxicity: None known

Carcinogenic Effects: None known

Mutagenic Effects: None known

Teratogenic Effects: None known

Developmental Toxicity: None known

Acute Effects on Humans: May cause skin, eye, and respiratory irritation.

Sensitization: Repeated or prolonged exposure to the substance at concentration above the exposure limits may cause respiratory tract and lung sensitization.

Carcinogenic Effects: This material is not known to cause cancer in animals or humans.

Existing Medical Conditions Aggravated By Exposure: May provoke asthmatic response in persons with asthma who are sensitive to airway irritants.

Section 12. Ecological Information

Ecotoxicity: No data available, however the material is not expected to have any deleterious toxic effect.

Environmental Fate: No data available regarding the environmental fate or biodegradation.

Section 13. Disposal Considerations

EPA Waste Number: Non-hazardous waste

Treatment: Dispose of according to all federal, state, local, and provincial environmental regulations.

Section 14. Transport Information

D.O.T. Classification: Not regulated

IMO/IMDG Not regulated

Classification:

IATA Classification: Not regulated

Section 15. Regulatory Information

Hazardous Material Information System:

Health	1
Fire Hazard	1
Physical Hazard	0
Personal Protection	X

US Federal Regulations:

Product Information: This product is not considered hazardous.

SARA 311/312:

Acute: No
Chronic: No
Fire: No
Pressure: No
Reactive: No

SARA 313: No reportable quantities of toxic chemical(s) subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372 are present

Regulatory Listings

United States (TSCA): Listed

Section 16. Other Information

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