

**SOIL GUARD®**

**Material Safety Data Sheet**

**1 Product Identification**

Product	Manufacturing Location And Address	Telephone Numbers Emergency Information
Soil Guard®	12402 Hwy. Floodwood, MN	

**Product:** Blended Mulch, Wood Fiber, Bonded Fiber Matrix

**Date Prepared:** 09/04/06

**Prepared By:** Mat, Inc.

**2 Hazardous Ingredients/Identity Information**

Chemical or Common Name/ CAS#	Percent	Exposure Limits
Wood CAS# None	>88	OSHA PEL-TWA 5mg/m <sup>3</sup> (a) OSHA PEL-STEL 10mg/m <sup>3</sup> (a) OSHA PEL-TWA 2.5mg/m <sup>3</sup> (b) ACGIH TLV-TWA 5mg/m <sup>3</sup> (c) ACGIH TLV-STEL 10mg/m <sup>3</sup> (c) ACGIH TLV-TWA 1mg/m <sup>3</sup> (d) WISHA PEL-TWA 5mg/m <sup>3</sup> (e) WISHA PEL-TWA 2.5mg/m <sup>3</sup> (f)
Trade Secret CAS # Proprietary	<1	OSHA PEL-TWA None ACGIH TLV-TWA None
Trade Secret CAS# Proprietary	<1	OSHA PEL-TWA None ACGIH TLV-TWA None
Yellow 46 L (Methine Dye) CAS# Proprietary	<1	OSHA PEL-TWA None ACGIH TLV-TWA None
Polysaccharide, Guar Powdered Tackifier CAS# None	<9	OSHA PEL-TWA None ACGIH TLV-TWA None

- (a) softwood or hardwood total dust
- (b) western red cedar total dust
- (c) softwood total dust
- (d) selected hardwood total dust; beech, oak
- (e) non-allergenic total dust
- (f) allergenic total dust

**Appearance and Odor:** Dyed yellow, wood fiber with a slightly woody odor. The wood component may consist of: aspen, beech, birch and /or cottonwood

**3 Physical/Chemical Characteristics**

Boiling Points (F or C)	NAP
Vapor Pressure (mm Hg)	NAP
Vapor Density (Air = 1)	NAP
Specific Gravity (H2O=1)	0.02-0.80 (loose fiber)
Melting Point	NAP
Evaporation Point (Butyl Acetate=1)	NAP
Solubility in water	< 0.1%
% Volatils by volume @ 70° F	0

**4 Fire and Explosion Hazard Data**

<b>Flash Point (Method Used):</b> NAP
<b>Flammable Limits:</b> LEL: See below under "Unusual Fire and Explosion Hazards" UEL: NAP
<b>Extinguishing Media:</b> Water, carbon dioxide, sand
<b>Auto-ignition Temperature:</b> 400° - 500° F <b>Special Firefighting Procedures:</b> None <b>Unusual Fire and Explosion Hazards:</b> Depending on moisture content and more importantly particle diameter, wood dust may explode in the presence of an ignition source. An airborne concentration of 40 gram (40,000 mg) of dust per cubic meter of air is often used as the LEL for wood dusts. 30 grams per cubic meter for cellulose dust.

**5 Reactivity Data**

<b>Stability:</b> ( ) Unstable (X) Stable Conditions to Avoid: NAP
<b>Incompatibility (Materials to Avoid):</b> Avoid contact with oxidizing agents. Avoid open flame. Product may ignite at temperatures in excess of 400° F.
<b>Hazardous Decomposition or By-Products:</b> Thermal decomposition products include carbon monoxide, carbon dioxide, aliphatic aldehydes, rosin acids, terpenes, and polycyclic aromatic hydrocarbons.
<b>Hazardous Polymerization:</b> ( ) May Occur (X) Will Not Occur Conditions to Avoid: NAP

## 6 PRECAUTIONS FOR SAFE HANDLING AND USES

### Steps to be Taken In Case Material Is Released or Spilled:

Not applicable for product in purchased form. Wood dust may be vacuumed or shoveled for recovery or disposal. Avoid dusty conditions and provide good ventilation. Use NIOSH/MSHA-approved respirator and goggles where ventilation is not possible.

### Waste Disposal Method:

If disposed of or discarded in its purchased form, incineration is preferable. It is, however, the user's responsibility to determine at the time of disposal whether your product meets RCRA criteria for hazardous waste. Follow applicable federal, state or local regulations.

### Precautions to be Taken in Handling and Storage:

No special handling precautions are required. Keep in cool, dry place away from open flame. The clear, water soluble packet contained inside the bale contains a chemical component that when heated, may release small quantities of formaldehyde gas. After blending bale with water, this hazard is minimized. Finished, blended product contains less than 0.1% (0.000135%) free formaldehyde. Store in well vented area.

### Other Precautions:

A NIOSH/MSHA - approved respirator and goggles should be worn when the allowable exposure limits may be exceeded.

## 7 HEALTH HAZARD DATA

### Primary Health Hazard(s):

The primary health hazards posed by this product are thought to be due to exposure to wood dust. However, handling material inside the water soluble packet contained inside the bale may result in exposure to free gaseous formaldehyde.

### Primary Route(s) of Exposure:

- ( ) Ingestion
- (X) Skin      Dust
- (X) Inhalation      Dust

### Acute Health Hazards:

Signs and symptoms of exposure; emergency and first aid procedures:

#### INGESTION:

Not applicable under normal use.

#### EYE CONTACT:

Wood dust may cause mechanical irritation. Treat dust in eye as foreign object. Flush with water to remove dust particle. Get medical help if irritation persists.

#### SKIN CONTACT:

Wood dust(s) of certain species can elicit allergic contact dermatitis in sensitized individuals, as well as mechanical irritation resulting in erythema and hives. Get medical help if rash, irritation or dermatitis persists.

#### SKIN ABSORPTION:

Not known to occur under normal use.

#### INHALATION:

Wood dust may cause unpleasant deposit/obstruction in the nasal passages, resulting in dryness of nose, dry cough and headaches.

Remove to fresh air. Get medical help if persistent irritation, severe coughing or breathing difficulty occurs.

### Medical Conditions Generally Aggravated by Exposure:

Wood dust may aggravate preexisting respiratory conditions or allergies.

### Chronic health Hazards:

Wood dust(s), depending on the species, (for example, iroko, cocobolo), may cause allergic contact dermatitis with prolonged repetitive contact, and respiratory sensitization after prolonged exposure to elevated dust levels (for example, western red cedar). Wood dust has been alleged to cause nasal/paranasal sinus cancer (certain European Hardwoods: oak and beech).

### Carcinogenicity Listing:

- ( ) NTP: Not listed
- ( ) IARC Monographs: Not listed
- ( ) OSHA Regulated: Not listed

## 8 CONTROL MEASURES

### Personal Protective Equipment:

#### RESPIRATORY PROTECTION:

A NIOSH/MSHA - approved respirator is recommended when the allowable exposure limits may be exceeded.

#### PROTECTIVE GLOVES:

Not required. However, cloth, canvas or leather gloves are recommended to minimize potential mechanical irritation from handling product.

#### EYE PROTECTION:

Not applicable for product in purchased form. Goggles or safety glasses are recommended when mixing this product, and in areas with high dust levels.

#### OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Not applicable for product in purchased form. Outer garments may be desirable in extremely dusty areas.

#### WORK/HYGIENIC PRACTICES:

Follow good hygienic and housekeeping practices. Clean up areas where wood dust settles to avoid excessive accumulation of this combustible material. Minimize blowdown or other practices that generate high airborne-dust concentrations.

#### VENTILATION:

##### LOCAL EXHAUST:

Provide local exhaust as needed so that exposure limits are met.

##### MECHANICAL (GENERAL):

Provide general ventilation in processing and storage areas as needed so that exposure limits are met.

##### SPECIAL:

Self-contained breathing apparatus (SCBA) recommended when fighting fire.

##### OTHER: NAP

## 9 Transportation Data

DOT Proper Shipping Name: Not Regulated

Hazard Class/Division Number:

ID Number:

Packing Group:

Label/Placard Required:

DOT Hazardous Substance:

## 10 USER'S RESPONSIBILITY

The information contained in this Material Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if this information is suitable for their applications and to follow safety precautions as may be necessary. The user has the responsibility to make sure that this sheet is the most up-to-date issue.

## 11 ADDITIONAL INFORMATION

### Definition of Common Terms

ACGIH = American conference of Governmental Industrial Hygienists

C = Ceiling Limit

CAS# = Chemical Abstracts System Number

IARC = International Agency for Research on Cancer

MSHA = Mining Safety and Health Administration

NAP = Not Applicable

NAV = Not Available

NIOSH = National Institute for Occupational Safety and Health

NTP = National Toxicology Program

OSHA = Occupational Safety and Health

PEL = Permissible Exposure Limit

STEL = Short-Term Exposure Limit (15 minutes)

TLV = Threshold Limit Value

TWA = Time Weighted Average (8 hours)

WISHA = Washington Industrial Safety and Health Administration