



Terra-Matrix™ SMM

Stabilized Mulch Matrix



Description

Terra-Matrix™ SMM is a fully biodegradable, Stabilized Mulch Matrix composed of 100% recycled Thermally Refined™ wood fibers and naturally derived biopolymers. The SMM may require a 24-48 hour curing period to achieve maximum performance. The SMM is phytosanitized, free from plastic netting, and when cured forms an intimate bond with the soil surface to create a continuous, porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth.

Recommended Applications

- Erosion control for slopes ranging from mild to steep (≤2H:1V)
- Rough graded slopes
- Equivalent performance to some rolled erosion control blankets with plastic nettings
- Enhancement of vegetation establishment

Technical Data

Physical Properties*	Test Method	Units	Minimum Value
Mass/Unit Area	ASTM D6566 ¹	g/m ² (oz/yd ²)	305 (9.0)
Thickness	ASTM D6525 ¹	mm (in)	2.5 (0.1)
Wet Bond Strength	ASTM D6818 ¹	N/m (lb/ft)	66 (4.5)
Ground Cover	ASTM D6567 ¹	%	95
Water Holding Capacity	ASTM D7367	%	1300
Material Color	Observed	n/a	Green
Performance Properties*	Test Method	Units	Value
Cover Factor ²	Large Scale ⁴	n/a	< 0.10
Percent Effectiveness ³	Large Scale ⁴	%	> 90
Cure Time	Observed	hours	24 — 48
Vegetation Establishment	ASTM D7322 ¹	%	400 minimum
Environmental Properties*	Test Method	Units	Typical Value
Functional Longevity ⁵	ASTM D5338	n/a	Up to 6 months
Ecotoxicity	EPA 2021.0	%	96-hr LC50 > 100%
Biodegradability	ASTM D5338	%	100
Product Composition	Typical Value		
Thermally Processed Wood Fiber ⁶ (within a pressurized vessel)	83 % ± 3 %		
Crosslinked Biopolymers and Water Absorbents	5 % ± 1 %		
Moisture Content	12 % ± 3 %		

* When uniformly applied at a rate of 3000 pounds per acre (3400 kilograms/hectare) under laboratory conditions. 1. ASTM test methods developed for Rolled Erosion Control Products that have been modified to accommodate Hydraulic Erosion Control Products. 2. Cover Factor is calculated as soil loss ratio of treated surface versus an untreated control surface. 3. % Effectiveness = One minus Cover Factor multiplied by 100%. 4. Large scale testing conducted at Utah Water Research Laboratory. For specific testing information please contact a Profile technical service representative at 866-325-6262. 5. Functional Longevity is the estimated time period, based upon field observations, that a material can be anticipated to provide erosion control and agronomic benefits as influenced by composition, as well as site-specific conditions, including; but not limited to – temperature, moisture, light conditions, soils, biological activity, vegetative establishment and other environmental factors. 6. Heated to a temperature greater than 380 degrees Fahrenheit (193 degrees Celsius) for 5 minutes at a pressure greater than 50 psi (345 kPa) in order to be Thermally Refined™/Processed and to achieve phytosanitization.

Packaging Data

Properties	Test Method	Units	Nominal Value
Bag Weight	Scale	kg (lb)	22.7 (50)
Bags per Pallet	Observed	#	40

UV and weather-resistant plastic bags. Pallets are weather-proof stretch wrapped with UV resistant pallet cover.

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