

Rainier FiberTM



Rainier Extreme DE **For Control Of Dust And Erosion**

DESCRIPTION

Rainier Extreme DE consists of long strand 100% virgin wood fibers along with a high strength, non-toxic, high viscosity, hydrocolloid-based and cross-linked organic tackifier. *This combination makes the product very effective for both dust and erosion control.* No synthetic or plastic fibers, which are not naturally biodegradable, are added or blended into the pure wood fiber.

Fugitive Dust Control: *Rainier Extreme DE* sprays on like a hydromulch and forms a wet matrix cover that adheres to the soil. During spraying, the excess slurry liquid is absorbed by the soil and the tackifier binds the soil particles together. When dry, the matrix is porous, but it holds fugitive dust particles in place. *Rainier Extreme DE* has superior adhesion to a wide range of soil, sand and organic dust sources for greater longevity. If the soil is fractured by traffic the strength is reconstituted by rewetting. See Application Rates on page 2.

Erosion Control: With heavier applications, sufficient to form a blanket, *Rainier Extreme DE* performs like a bonded fiber matrix for erosion control. The blanket protects the soil surface immediately upon application because the wood fibers twist and interlock with each other and bond to the soil surface as they dry. The matrix is erosion resistant and retains its integrity to protect the soil despite re-wetting. Recommended application rates are shown on page 2.

ADVANTAGES

- Binds fine soil particles to the soil to prevent fugitive dust.
- No synthetic or plastic fibers, which are not naturally biodegradable, are added to the fiber.
- As a fiber mat, it retains integrity after repeated rains for increased erosion protection.
- Conforms to all surface contours. Eliminates tenting and rilling.
- Non-toxic to aquatic, fish or wildlife. Has no germination or growth inhibiting factors.
- High temperature 177°C (350°F) steam and thermo-mechanical refining sterilizes the fiber.
- No viable noxious or other plant seed in the fiber. All seeds are sterilized.
- Tackifier additive is homogeneously mixed with the fiber. It's all in the same bag.

Rainier Extreme DE is fast to load in hydroseeding equipment from easy-to-handle plastic bags. The fibers are sized for maximum loading in a tank, and along with the tackifier they quickly disperse to make a homogeneous slurry. Seed and fertilizer can be added to the slurry for vegetation establishment. The fibers remain in suspension during agitation and pumping, and the slurry does not dewater when doing hose work.

The fibers are colored green with a biodegradable, water-soluble, non-toxic dye to help the operator apply the product uniformly. The dye is free from copper, mercury and arsenic and will not permanently stain concrete or painted surfaces. Also, the fiber is free from lead paint, printing ink, varnish, petroleum products, seed germination inhibitors, or chlorine bleach, and there are no contaminants that will inhibit plant growth. The dyed mulch fiber is non-toxic and not harmful to animal, aquatic, fish or plant life and is completely biodegradable.

PRODUCT FEATURES

- Forms a stable dust control matrix or an erosion control mat.
- Made from selected, fresh cut, clean, 100% whole wood chips. 100% biodegradable.
- Fiber stays in uniform suspension and blends with seed and fertilizer.
- Goes into slurry quickly.
- Pumps easy in hydromulching machines.
- Provides favorable micro-climate for fast seed germination

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PRODUCT SPECIFICATIONS

Rainier Extreme DE is manufactured to specific fiber sizes in a heat controlled environment to provide best job-site performance. The clean, virgin wood chips are processed in high temperature 177°C (350°F) steam, and the thermo-mechanical refining process produces long, soft, woolly fibers. A minimum of 25% of the fibers are 10 mm (3/8 inch) long and a minimum of 50% are retained on a 710 µm (No. 25) sieve. The fibers have physical features that tend to intertwine with each other, thus forming a more protective blanket.

Composition: Refined virgin wood fiber (total weight basis).....	90%	
Proprietary cross-linked binder (total weight basis).....	10% min.	
Moisture content (total weight basis)..... CA Test 226	12.0% ± 3%	
Organic Matter (oven dry weight basis)..... AASHTO T-267.....	97.0%	
Ash Content (oven dry weight basis)..... TAPPI T-413	3.0%	
pH @ 3% concentration in water	SW846 9045	4.8±0.5
Water holding capacity (minimum)	CA-DOT TL_2176-1-76-36.....	1,600 gms
Boron Content	SW846 6010B	<100 ppm
Color		Green

PERFORMANCE PROPERTIES FOR EROSION CONTROL

Percent Effectiveness:	Test Method: Observed.....	> 99%
Seed Germination Enhancement	Test Method ASTM D-7322	>500%
Functional Longevity	Test Method Observed	>12 Mo
Erosion Control Technology Council HECF Classification		Long Term

PACKAGING

Rainier Extreme DE is compressed and sealed in heavy duty plastic bags that have a UV inhibitor. Bag weight is a nominal 50 lbs. (22.7 kg) net and measures 10 x 19 x 29 inches. There are 40 bags per pallet which is made into a tight, stretch-wrapped unit.

RECOMMENDED APPLICATION RATES

For Dust Control:

Temporary and short term dust control:	1,000 lbs per acre
Moderate to severe dust control:	2,000 lbs per acre

For Erosion Control:

Short Term and flat pads:	2,000 lbs/acre – 3H 1V slopes
	2,000 to 2500 lbs/acre – 2.5H: 1V slopes.
Long Term and more severe slopes:	3,000 to 3,500 lbs/acre – slopes to 2H: 1V
	3,500 to 4,000 lbs/acre -- slopes steeper than 2H:1V

Apply *Rainier Extreme DE* uniformly. Green dye is added to help the applicator maintain uniform coverage. If applying more than 2500 lbs/acre spray from two opposite directions to avoid light coverage, or shadowing, on the back side of ridges, rocks and depressions. Application should be made sufficiently in advance of rainfall to allow some drying time. Allow enough drying time between applications so some dry spots are showing on the surface.

Rainier Extreme DE complies with the above specifications and to Caltrans 2010 Standard Specifications, Section 21-1.02E Fiber; 21-1.02F(1) & 21-1.02F(1)1 & 21-1.02F(1)1.1 Tacifier; 21-1.02F(3) Bonded Fiber Matrix Tacifier; and 21-1.02K Bonded Fiber Matrix.

FOR MORE INFORMATION PLEASE CONTACT:

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