



Mesic™ Wood Fiber

1. General

1.1. Work Included. Mesic by LSC Environmental Products, LLC. (800) 800-7671 shall be furnished and applied as shown on the drawings and as required for proper installation and functioning of the product. The product is packaged in 50 lb bags.

2. Material

2.1. Mesic Wood Fiber. Mesic Wood Fiber is manufactured from specially prepared wood chips. The wood fiber is thermos-mechanical defibrating process and manufactured to contain a specific range of fibers averaging 0.25 inches or longer, with 40% or more retained on a 28-mesh screen (a Tyler Ro-Tap method). The manufacturing process of atmospheric disc refining separates the solid wood into its individual fiber and fiber bundles, while steam and drying completely sterilizes the fiber.

Hydro mulch disperses rapidly in water and remains in uniform suspension under agitation. It blends seed, fertilizer and other approved and specified materials to form a homogenous slurry. When applied with hydraulic planting equipment, the fibers form a strong moisture holding mat while allowing good percolation and a favorable microclimate for seed to germinate and growth.

The fibers are colored green with a water-soluble non-toxic dye to help the operator apply uniformly. The green color also gives a temporary grass-like appearance to the covered area. The dye will not stain masonry, concrete, asphalt or painted surface, and it is non-toxic to plant or animal life.

The wood fiber shall meet the following requirements:

- Moisture Content (total air dry weight basis) 12.0% ± 2%
- Organic Matter (oven dry weight basis) 99.3% ± 0.2%
- Ash Content (oven dry weight basis) 0.7% ± 0.2%
- pH at 3% consistency in water 4.8% ± 0.5%
- Moisture holding capacity > 1,250 (grams of water/100 gm oven dry fiber)
- Non-toxic to plant or animal life NO
- The fiber is sterilized and is weed free YES
- Biodegradability 100%

A Certificate of Compliance for the wood fiber shall be furnished to the engineer.

2183 Pennsylvania Avenue, Apalachin, NY 13732



2.2. Tackifier (optional – specify type if required). The tackifier to be applied in combination with the Mesic shall be EarthBound by LSC Environmental Products, LLC. Application rate must be 5 lb/ac. See EarthBound Brochure by LSC Environmental Products, LLC for further details.

2.3. Erosion Control Enhancement (optional – specify type if required). To enhance erosion control performance of Mesic, EarthGuard Liquid shall be added to Mesic. See EarthGuard Fiber Matrix Brochure by LSC Environmental Products, LLC for further details.

2.4. Seed (optional – specify type if required). The seed to be applied in combination with the Mesic shall be of Type _____ as shown in the plans and specified within these Special Provisions.

Seed shall be labeled by the vendors supplying the seed. Seed shall have been tested for purity and germination not more than 12 months prior to the application of the seed. Seed testing results shall be delivered to the Engineer prior to applying the seed. Seed labels furnished by the seed supplying vendor shall indicate the purity, germination and pure live seed as determined by testing.

Seed with a germination rate lower than the minimum rate specified may be used when approved by the Engineer in writing.

Seed specified without a germination requirement, at the time of sowing, shall be from the previous or current year's harvest, and shall be labeled to include the name date (month and year) collected and the name and address of the seed supplier.

2.5. Fertilizer (optional – specify type if required). The fertilizer to be applied in combination with the Mesic shall be _____ as shown in the plans and specified within these Special Provisions.

2.6. Lime (optional – specify type if required). The lime to be applied in combination with the Mesic shall be HydroLime by LSC Environmental Products as shown in the plans and specified within these Special Provisions.

2.6.1. Applications rates: Soil test should be performed and analyzed for accurate applications rates.

- pH \geq 6.6 35 lbs. per acre
- pH 6.5 - 6.0 50 lbs. per acre
- pH 5.9 - 5.5 100 lbs. per acre
- pH 5.4 – 5.0 150 lbs. per acre
- pH \leq 4.9 250 lbs. per acre
- No soil test provided, use 150 lbs. per acre



2.6.1 HydroLime Product Analysis (%) shall contain:

Calcium Carbonate	95
Magnesium Carbonate	4.5
C.C.E.	103.4
ENV	99

3. Application Rates

Apply Mesic with amendments list above in a one-step application or as a separate application after drilling or broadcasting seed and fertilizer. Good soil preparation is essential. Slurry containing seed and fertilizer is best applied from the hose by pointing the nozzle straight down to drive the material into the soil. The application should then be topped-off by allowing the material to “rain on” the surface to achieve approximately 85% coverage.

Minimum Application Rate: 1,500 Pounds / Acre.

4. BLENDING

Correct mixing and proper application are key factors in obtaining satisfactory performance. Engage agitators at $\frac{3}{4}$ speed. Fill hydroseeding vessel with water to at least $\frac{1}{3}$ capacity (high enough to cover agitators) prior to adding any Mesic. Continue to fill vessel with water and slowly add the EarthGuard Liquid or Mesic while agitators are in motion. Once the accurate amount of Mesic is loaded, add seed (if specified), and fertilizer (if specified). Continue to mix tank a minimum of 10 minutes prior to application.

If the hydroseeding unit has separate pump and agitator controls (example: Finns), minimize agitator speed once the slurry is completely mixed and before application so that the agitators are barely rotating. This will help increase application rate.

5. APPLICATION AND LOADING INSTRUCTIONS

The soil to which the Mesic slurry shall be applied to must be graded to remove any pre-existing rills and shall be compacted to meet project specifications. Track-walking or some other soil imprinting device is recommended to roughen the slope to slow water flows during a storm event.



5.1 Loading Instructions:

- 1) Fill vessel to at least 1/3 capacity (high enough to cover agitators).
- 2) Turn on agitators, place in reverse gear, and adjust to ¾ speed rate.
- 3) Continue to fill vessel with water and slowly add EarthBound tackifier (or EarthGuard Erosion Enhancer) while agitators are in motion.
- 4) Once the accurate amount of EarthBound is in a slurry solution, add Mesic.
- 5) Once Mesic has been loaded, add seed (if specified), lime (if specified), fertilizer (if specified) and other amendments (if specified).
- 6) Continue to mix tank a minimum of 10 minutes prior to application. Toggle between forward and reverse gears to properly mix slurry. Maintain agitator speed at ¾ rate or slightly above.
- 7) Place agitators in forward gear and begin application.

Caution should be taken to avoid creating puddles or runoff. It is recommended for the slurry to be sprayed from multiple directions and angles to ensure proper coverage. Treated areas shall not be disturbed after application.

It is recommended that Mesic be applied 24 hours prior to or following a storm event if possible.

6. Repair of Damaged Area

Any damaged area shall be repaired utilizing the exact blend and application procedure as specified above.

7. Payment

Mesic will be paid for by the square foot (square meter) of area treated. The price shall include full compensation furnishing all labor, materials, tools, equipment, and incidentals, and for doing all Mesic work, complete in place, as shown on the plans, and as specified in these special provisions, and as directed by the Engineer.