



# ProMatrix™

## Engineered Fiber Matrix



### Description

ProMatrix™ Engineered Fiber Matrix™ (EFM) is a fully biodegradable matrix composed of 100% recycled Thermally Refined™ wood fibers, crimped interlocking man-made biodegradable fibers, and naturally derived biopolymers. ProMatrix is phytosanitized, free from harmful plastic nettings, 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. ProMatrix may require a 24-48 hour curing period to achieve maximum performance.

### Recommended Applications

- Erosion control for slopes ranging from mild to steep (≤2H:1V)
- Rough graded slopes
- Meets or exceeds performance of bonded fiber matrix (BFM) and stabilized mulch matrix (SMM)
- Equivalent performance to most 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 <sup>1</sup>  | g/m <sup>2</sup> (oz/yd <sup>2</sup> ) | > 393 (11.6)      |
| Thickness                                                                 | ASTM D6525 <sup>1</sup>  | mm (in)                                | > 4 (0.16)        |
| Ground Cover                                                              | ASTM D6567 <sup>1</sup>  | %                                      | > 98              |
| Water Holding Capacity                                                    | ASTM D7367               | %                                      | 1100              |
| Material Color                                                            | Observed                 | n/a                                    | Green             |
| Performance Properties*                                                   | Test Method              | Units                                  | Value             |
| Cover Factor <sup>2</sup>                                                 | Large Scale <sup>4</sup> | n/a                                    | < 0.05            |
| Percent Effectiveness <sup>3</sup>                                        | Large Scale <sup>4</sup> | %                                      | > 95              |
| Cure Time                                                                 | Observed                 | hours                                  | 24 — 48           |
| Vegetation Establishment                                                  | ASTM D7322 <sup>1</sup>  | %                                      | 600 minimum       |
| Environmental Properties*                                                 | Test Method              | Units                                  | Typical Value     |
| Functional Longevity <sup>5</sup>                                         | Observed                 | n/a                                    | Up to 12 months   |
| Ecotoxicity                                                               | EPA 2021.0               | %                                      | 96-hr LC50 > 100% |
| Biodegradability                                                          | ASTM D5338               | %                                      | 100               |
| Product Composition                                                       | Typical Value            |                                        |                   |
| Thermally Processed Wood Fiber <sup>6</sup> (within a pressurized vessel) | 77 %                     |                                        |                   |
| Wetting Agents                                                            | 18 %                     |                                        |                   |
| Crimped, Man-Made Biodegradable Interlocking Fibers                       | 2.5 %                    |                                        |                   |
| Proprietary Mineral Activator                                             | 2.5 %                    |                                        |                   |

\* When uniformly applied at a rate of 3500 pounds per acre (3900 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 800-508-8681. 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.

### Profile Products

750 Lake Cook Road, Ste. 440  
Buffalo Grove, IL 60089  
800-508-8681

[www.profileproducts.com](http://www.profileproducts.com)

To the best of our knowledge, the information contained herein is accurate. However, Profile Products cannot assume any liability whatsoever for the accuracy or completeness thereof. Final determination of the suitability of any information or material for the use contemplated, of its manner of use and whether the suggested use infringes any patents is the sole responsibility of the user.