



# HydroStraw® High-Efficiency Bonded Fiber Matrix (BFM)



Solutions for your Environment™

## Description

HydroStraw® High-Efficiency (HE) Bonded Fiber Matrix (BFM) is a biodegradable, High Efficiency BFM composed of renewable Heat & Mechanically Treated™ (HMT™) wheat straw fibers, refined pulp fibers and wetting agents (including high-viscosity colloidal polysaccharides, cross-linked biopolymers, and water absorbents). The BFM contains no weed seeds or plastic components and upon application forms an intimate bond with the soil surface to create a porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth.

## Recommended Applications

- Erosion control and revegetation
- Rough graded slopes
- Alternative to Wood Fiber BFMs
- Alternative to rolled erosion control blankets

## Technical Data

Physical Properties	Test Method	Units	Tested Value
Specification for Hydraulically-Applied Wheat Straw	ASTM D8202	Compliant	Yes
Water Holding Capacity	ASTM D7367	%	≥ 1,200
ISTA Weed Free <sup>1</sup>	Purity Analysis	Pass/Fail	Pass
Material Color	Observed	n/a	Green
Performance Properties*	Test Method	Units	Tested Value
C-Factor <sup>2</sup>	ASTM D8298 - Type 1	n/a	≤ 0.05
Percent Effectiveness <sup>3</sup>	ASTM D8298 - Type 1	%	≥ 95%
Cure Time <sup>4</sup>	Observed	Hours	4-24
Vegetation Establishment	ASTM D7322	%	≥ 450
Functional Longevity <sup>5</sup>	Observed	Months	6 - 12
Environmental Properties	Test Method	Units	Tested Value
Ecotoxicity <sup>6</sup>	EPA 2021.0	%	> 100
Elemental Impurity Limits	ASTM D8082	Pass/Fail	Pass
Biodegradability	ASTM D5338	n/a	Yes
USDA Certified Biobased Content <sup>7</sup>	ASTM D6866	%	94
Product Composition	Typical Value		
Heat & Mechanically Treated™ (HMT™) Wheat Straw	60%		
Refined Pulp Fibers	30%		
Wetting Agents - including high-viscosity colloidal polysaccharides, cross-linked biopolymers, and water absorbents	10%		

\*When uniformly applied at 3,000 lb/acre (3,360 kg/hectare) 1. HMT™ Wheat Straw is steamed to 212° Fahrenheit (100° Celsius) and samples are analyzed by an accredited International Seed Testing Association (ISTA) laboratory. 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. Cure time is time range required for product to fully dry and/or demonstrate erosion control effectiveness under non-saturated conditions. 5. Functional Longevity is 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. 48-hr LC<sub>50</sub> refers to percent concentration of a substance in water when 50% percent mortality of an organism is reached. 50% mortality of tested species (*Daphnia magna*) could not be achieved when subjected to 100% effluent concentration proving material to be acutely non-toxic. 7. BioPreferred Program is a USDA-led initiative that aims to assist in development and expansion of markets for biobased products.



## 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 or +1-847-215-1144  
[www.profileproducts.com](http://www.profileproducts.com)

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