

**92% Highly Filled Oat Hull Cellulose Polymer Masterbatch**
**5002**
**PRODUCT DESCRIPTION**

FDA approved 92% active fine natural fiber masterbatch in a polyolefin matrix suitable for let down in compounding, molding or extrusion applications. Alternative description: PR00548.

**GENERAL INFORMATION**

Resin	Polyolefin
Filler	Oat Hull Cellulose
Fill level	92%
Uses	Letdowns
Form	California Pellets

PHYSICAL PROPERTIES	Typical Value Range	Units	Method
Specific Gravity	1.39 - 1.45	N/A	ASTM D792
Moisture Content	< 3.0	%	ASTM D6980
Pellet Count	7.2 - 8.2	g/100 pellets	

**STORAGE, SHELF LIFE, PROCESSING LIMITATIONS, AND PACKAGING**

Keep in the original container or an approved alternative made from a compatible material with desiccant, kept tightly closed when not in use and out of direct sunlight. Dry material at 85 °C for 3-4 hours prior to compounding if needed. Product is shelf stable for at least 1 year and must be processed under 220 °C. Compatible with PE, PP, PLA, and PVC. Product is available in 1000 pound gaylords.

**MASTERBATCH PERFORMANCE**

Testing is performed on ASTM standard injection molded tensile and flexural bars made from the appropriate letdown ratios into Polypropylene (PP) via twin screw extrusion.

Active Natural Fiber Weight %	20%	30%	40%	Units	Method
<u>Tensile</u>					ASTM D638
Modulus	316221	388202	474813	psi	
Strength	3924	3482	3155	psi	
Elongation @ Break	4.4	2.7	1.8	%	
<u>Flexural</u>					ASTM D790
Modulus	295414	328796	379861	psi	
Strength	7240	6603	6015	psi	
<u>Impact (IZOD)</u>					ASTM D256 & ASTM D4812
Unnotched	3.0	2.5	1.9	ft-lbf/in	
Notched	0.32	0.34	0.35	ft-lbf/in	
<u>Specific Gravity</u>	0.98	1.03	1.07	N/A	ASTM D792
<u>Moisture Absorption @ 96 hours</u>	0.5 (0.05)	0.69 (0.07)	0.96 (0.13)	% Uptake (SD)	ASTM D5229

**Important Notice Regarding this Information**

The statements, technical information and recommendations contained herein are believed to be accurate. However, Interfacial Consultants makes no guarantee or warranty and does not assume any liability with respect to the accuracy or completeness of such information. Suitability of the product for a specific final end use is the sole responsibility of the user. The data contained herein are typical properties only and are not to be used as a specification.

\*SD refers to Standard Deviation