

External Product Specification CONFIDENTIAL Issued: 05/05/2020 Replaces: 11/12/2010

# Parboiled Rice Hulls (PBH)

## **GENERAL DESCRIPTION**

**Parboiled Rice Hulls** are a natural, renewable plant material useful in a wide variety of applications including plant potting media in the greenhouse and nursery industry, pressing aid in the extraction of fruit juices, and tableting aid (excipient) in pharmaceutical products.

They are particularly well suited to these applications due to the washing and heat treatment received in the parboiling process. While some uses are best served by their natural size, shape, structure, and bulking properties, others require particle size modification.

### **PROCESSING**

**Parboiled Rice Hulls** have been subjected to a series of heat treatments that collectively sterilize and render any residual rice kernels and other seeds non-viable. This process includes steeping in water at temperatures in excess of 140 ° F, steaming under pressure to temperatures exceeding 212° F, and hotair drying by combustion gases at 500 ° F, or higher. While the hulls are rendered practically sterile at the conclusion of the heat treatments described above, it must be recognized that subsequent handling is not aseptic and that the material may not be sterile upon delivery to customers.

#### **INGREDIENTS**

Rice Hulls

#### PHYSICAL PROPERTIES (Typical)

•	Color	Tan to Light Brown
•	Bulk Density, Unground, g/cc (lbs/ft <sup>3</sup> )	0.10 - 0.16 (6.24 - 9.99)
•	Specific Gravity, (H <sub>2</sub> O = 1.00)	0.67 - 0.74
•	Water Holding Capacity, % w/w	65 – 85

## **CHEMICAL ANALYSIS (Typical)**

•	Moisture, %	12.0 Max
•	рН	6.0 - 7.0
•	Ash, %	14.0 - 20.0
•	Silicon, %	6.0 - 10.0
•	Crude Fiber, %	35.0 – 45.0

#### **PACKAGING**

Compressed 30 Cubic Foot Bales (Approximately 730 pounds) Compressed 7-8 Cubic Foot Bales (50 pounds)

Note: While the information above is believed to be accurate, it is provided only as guidance and does not constitute any representation, condition, or warranty regarding the use of the product. We encourage potential new customers to experiment on a small scale to confirm functionality in specific applications. It is the customer's responsibility to guard against violation of intellectual property rights.