



MICRO POWDERS, INC.

Sustainability of Rice Bran Wax Powders

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The Oxford Dictionary defines “Sustainability” as:

- avoidance of the depletion of natural resources in order to maintain an ecological balance

Micro Powders has taken significant steps to transform their personal care product portfolio towards products that embrace this aspect of sustainability. It should be noted that the overall subject of sustainability is much more complicated, and includes economic factors, environmental aspects, and social/cultural elements.

Oryza sativa, or rice, is an important food source around the world. As part of the processing of rice, the bran husk is removed and discarded to derive white rice. The bran husk is a food processing waste stream that may be disposed or otherwise repurposed.

The bran husk of *Oryza sativa* contains a natural waxy substance that can be extracted and purified into (INCI) Oryza Sativa (Rice) Bran Wax. This natural substance can be upcycled into a variety of personal care ingredients, including the following Micro Powders’ products:

Exfoliants:

- | | |
|---------------------------|----------------------------------------------------------|
| • Naturebead R20 | 20 mesh spherical rice bran wax |
| • Naturebead GreenTea R20 | 20 mesh spherical rice bran wax + green tea leaf extract |
| • NatureBrown 20RS | 20 mesh spherical rice bran wax + FD&C colors (brown) |
| • NatureBlue 20RS | 20 mesh spherical rice bran wax + FD&C colors (blue) |
| • NatureGreen 20RS | 20 mesh spherical rice bran wax + FD&C colors (green) |
| • NatureRed 20RS | 20 mesh spherical rice bran wax + FD&C colors (red) |

Fine Powders:

- | | |
|--------------------|-------------------------------------------------------|
| • Naturesoft 860R | 8 µm irregular rice bran wax |
| • Naturesoft 880GT | 8 µm irregular rice bran wax + green tea leaf extract |

Products based on Oryza Sativa (Rice) Bran Wax demonstrate the following aspects of sustainability:

- ✓ Sourced from a natural and renewable plant resource
- ✓ Does not compete with human food resources
- ✓ Repurposes a material that could otherwise go to waste
- ✓ Biodegradable to promote a circular economy

We hope this information is useful.