

# RICE BRAN OIL

## PRODUCT DATA SHEET



**RICE BRAN OIL** is extracted from the germ and inner husk of fresh rice bran.

Textron's **RICE BRAN OIL** is a natural, refined vegetable oil that has relatively high amounts of Vitamin E.

**RICE BRAN OIL** is high in fatty acids and unsaponifiables and contains about 1.5% of gamma-oryzanol. The high antioxidant property of gamma-oryzanol has been widely recognized. Studies have shown several physiological effects related to gamma-oryzanol and related rice bran oil components. These include its ability to reduce plasma cholesterol<sup>1</sup>.

**RICE BRAN OIL** contains significant levels (approximately 500 ppm) of tocotrienols<sup>2</sup>. These occur in at least four known forms and are similar to the tocopherols in chemical structure. They belong to the vitamin E family and are powerful natural antioxidants.

### TECHNICAL DATA

<b>Appearance:</b>	Clear oil
<b>Saponification value:</b>	185 - 195
<b>Iodine value:</b>	92 - 115
<b>Acid value:</b>	max. 0.6
<b>Specific gravity:</b>	0.916 - 0.922 g/ml

Fatty Acid	Composition
Linoleic acid (Omega 6)	29 - 45 %
Alpha-Linolenic acid (Omega 3)	Max. 3%
Palmitic acid	12 - 22 %

<sup>1</sup> Lichenstein et al., *Arteriosclerosis and Thrombosis*, Vol 14, 549-556, (1994)

<sup>2</sup> Eitenmiller, R. R. 1997. *Vitamin E Content of Fats and Oils: Nutritional Implications*. *Food Technol.* 51(5): 78-81.

## RICE BRAN OIL



### APPLICATION

**RICE BRAN OIL** can be used in all types of products for softening and moisturizing properties. It is an extremely gentle oil making it ideal for sensitive, mature or delicate skin where additional moisturization is desired.

**RICE BRAN OIL** is extremely effective in keeping skin smooth which is thought to be a combined function of the many components of the oil.

Gamma oryzanol in **RICE BRAN OIL** is a component that can impede the progress of melanin pigmentation by restraining the erythema activity of tyrosinase. Because of this property, **RICE BRAN OIL** can be used in any type of skin or hair sunscreen products.

**RICE BRAN OIL** can be incorporated into lipsticks, providing lip conditioning and strong mold stability, and into nail polishes, providing smooth spreadability to the formula.

**RICE BRAN OIL** may be applied directly to the skin and hair. It may also be easily incorporated as an active ingredient or an ideal carrier in skin and hair care products. It is ideally suited for sun care products. The recommended dosage is between 3 and 10%.

**INCI Name:** INCI Name: Oryza Sativa (Rice) Bran Oil

**RICE BRAN OIL****CODE** 008272      **SPECIFICATION**      **Nº** 00827201

<b>PARAMETERS</b>	<b>SPECIFICATIONS</b>	<b>EDITION - 08/08/05</b>
Density	0.916 - 0.922 g/ml	
Acid value	Max. 0.6	
Iodine value	92 - 115	
Saponification value	185 - 195	
<b>FATTY ACID COMPOSITION</b>		
Myristic acid	Max. 1.0 %	
Palmitic acid	12.0 - 22.0 %	
Palmitoleic acid	Max. 0.5 %	
Stearic acid	0.5 - 4.0 %	
Oleic acid	35.0 - 50.0 %	
Linoleic acid	29.0 - 45.0 %	
Linolenic acid	Max. 3.0 %	
Arachidic acid	Max. 1.2 %	
Gadoleic acid	Max. 1.0 %	
Behenic acid	Max. 0.5 %	
Others	Max. 3.0 %	

**PACKING****REMARKS**

Keep full and well closed in a dry place and away from light.