

Product Lot # Date of Production Shelf Life	RICE BRAN OIL 062203011 03/2022 3 years		
Properties	Specifications	Results	
Free Fatty Acids (as oleic) Peroxide Value Refractive Index 40°C Iodine Value Color Lovibond 5 ¼" <b>Fatty Acid Composition</b> C16:0 C18:0 C18:1 C18:2 C18:3 Oryzanol	$\begin{array}{r} 0.0 - 0.5 \\ 0.0 - 10.0 \\ 1.460 - 1.476 \\ 90 - 115 \\ 5 \text{R}/50 \text{Y max} \end{array}$ $\begin{array}{r} 12 - 23 \\ 0.5 - 4.0 \\ 35 - 50 \\ 21 - 45 \\ 0.0 - 2.9 \end{array}$	0.005 0.30 1.472 98.8 2.3 R/30 Y 17.1 1.5 39.6 34.8 0.8 1700 ppm	



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Product Lot # Manufacturing Date Shelf Life	RICE BRAN OIL 190222 02/2022 3 years		
Properties	Specifications	Results	
Free Fatty Acids (as oleic) Peroxide value Refractive Index Iodine value Color Lovibond 5 <sup>1</sup> / <sub>4</sub> <b>Fatty Acid Composition</b> C16:0 C18:0	0.5 Max 10.0 Max 1.460 – 1.473 90 – 115 5 R/50Y Max 12 – 23 0.5 - 4.0	0.07 0.25 1.4642 99.75 3 R/24Y 19.41 1.93	
C18:1	35 – 50	42.22	
C18:2	21 - 45	32.45	
C18:3	2.9 Max	1.09	
Oryzanol		3000	



020821 08/2021 2 years		
Specifications	Results	
0.0 - 0.5 0.0 - 10.0 1.460 - 1.476 90 - 115 5R/50Y max 12 - 23 0.5 - 4.0 35 - 50 21 - 45 0.0 - 2.9	0.06 0.55 1.4656 98.02 3.0 R/30 Y 19.36 2.02 41.98 32.41 1.14	
C	2 years $\begin{array}{r} \text{Specifications} \\ 0.0 - 0.5 \\ 0.0 - 10.0 \\ 1.460 - 1.476 \\ 90 - 115 \\ 5\text{R/50Y max} \\ 12 - 23 \\ 0.5 - 4.0 \\ 35 - 50 \\ 21 - 45 \\ \end{array}$	$\begin{array}{c c} \hline 08/2021\\ \hline 2 \ years \end{array} \\ \hline \hline Specifications & Results \\ \hline 0.0 - 0.5 & 0.06\\ \hline 0.0 - 10.0 & 0.55\\ \hline 1.460 - 1.476 & 1.4656\\ \hline 90 - 115 & 98.02\\ \hline 5R/50Y \ max & 3.0 \ R/30 \ Y \\ \hline 12 - 23 & 19.36\\ \hline 0.5 - 4.0 & 2.02\\ \hline 35 - 50 & 41.98\\ \hline 21 - 45 & 32.41 \\ \end{array}$



## **Certificate of Analysis**

Product Lot # Shelf Life	RICE BRAN OIL 13905/20 3 years		
Properties	Specifications	Results	
Free Fatty Acids (as oleic)	0.5 Max	0.1	
Peroxide value	10.0 Max	0.9	
Refractive Index	1.460 – 1.473	1.469	
lodine value	90 – 115	106	
Color Lovibond 5 1/4	5 R/50Y Max	1.9 R/28Y	
Fatty Acid Composition			
C16:0	12 – 23	16.7	
C18:0	0.5 - 4.0	2.3	
C18:1	35 – 50	43.8	
C18:2	21 - 45	34.6	
C18:3	2.9 Max	1.3	
Oryzanol		447	



**Properties** 

BRAN OIL
A11 RBDW 200 19
5

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Appearance	Clear & Bright
Color Lovibond 5 ¼" R	3.0
Color Lovibond 5 ¼" Y	32
Free Fatty Acids (as oleic)	0.06
Peroxide Value at time of packaging	2.3
Moisture and Matter Volatile	0.01
Refractive Index 40°C	1.4710
Iodine Value	100.41
Saponification Value	189.23
Specific Gravity 20ºC	0.919
Unsaponifiable Matter	0.45
Acid Value	0.10
Fatty Acid Composition	
C16:0	13.61
C18:0	2.22
C18:1	49.22
C18:2	32.93
C18:3	0.62
C20:0	0.38

This Certificate of Analysis was created by the manufacturer/distiller of the product. This information is believed to be up-to-date and correct; however, it is provided without any warranty. The customer is responsible for examining the product upon arrival and determining the safe use of the product in order to be in compliance with all applicable laws and regulations. The product must be stored in a cool, dry place away from direct light and heat, tightly sealed and away from children, the mentally infirm and pets. Essential oils shipped in amber plastic pharmaceutical grade bottles must be transferred to amber glass upon arrival, those shipped in aluminum bottles may be stored in such bottles for a minimum of 6 months, tightly sealed. All responsibility (including damage or injury) for the use of this and any other product purchased from Camden-Grey Essential Oils, Inc. rests with the purchaser/user. Camden-Grey's liability is limited to the paid value of this product.

Results



RICE BRAN OIL
1121108
2 years

Properties	Specifications	Results	
Flavor/Aroma	Typical	Complies	
Color (Lovibond) Red	0 – 5.0	3.2	
Free Fatty Acid	0 – 0.85	0.050	
Peroxide Value (MEQ/KG)	0-5.0	2.50	
Iodine Value (CG/G)	99 – 108	100.41	
Moisture Content	0-1.0	0.010	
Acid Value MG KOH/G	0-1.0	0.10	
Refractive Index	1.4660 - 1.4790	1.4716	
Saponification Value (MG/G)	110 – 200	189.23	