

NutriLayer™ Delivering Beauty . . . Naturally

NutriLayer™ is a natural active derived from rice bran oil. The selected rice bran oil is extracted and distilled from non-GMO rice and is not chemically altered.

Its holistic composition bridges health and beauty in topical applications.

NutriLayer™ is a nonsaponifiable fraction containing:

Rice bran waxes	48–66%
Squalene	20–30%
Mixed phytosterols	9–14%
Mixed tocopherols	3.5–4.5%
Mixed tocotrienols	1.5–3.0%

INCI name:

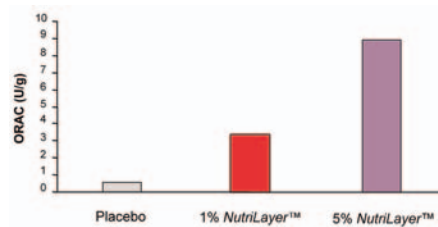
Oryza Sativa (Rice) Bran Oil Extract

- Absorbs three times its weight in water
- Reduction of TEWL lasting at least 6 hours
- Provides antioxidation properties
- Inhibits UV induced photo-oxidation
- Reduces lipid stripping effect of surfactants

Key Benefits

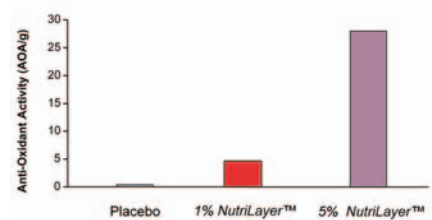
Component	Antioxidant Anti-free Radical & UV Protection	Moisturizing & Smoothing	Anti- inflammation & Soothing	Barrier Repair (TEWL)	Anti-aging
Rice Bran Waxes		■		■	
Squalene	■	■		■	
Phytosterols	■	■	■	■	■
Tocopherols	■	■	■		
Tocotrienols	■	■	■		■

DPPH Free Radical Absorption Capacity



1U—scavenging activity of 1 micromole of Trolox

Fatty Acid Anti-Oxidation Capacity



1AOA = 1 micromole of Trolox inhibits 50% linoleic acid peroxidation in 60 min.

NutriLayer™
Delivering Beauty... Naturally

EASTMAN

NutriLayer™

Delivering Beauty . . . Naturally

Face Cream Formulas Containing NutriLayer™

	Day Cream	Night Cream
Part A: Water Phase	wt%	wt%
Deionized Water	91.60	87.60
Glycerin	2.00	2.00
Ultraz 10 Carbomer ¹	0.20	0.20
Part B: Oil Phase		
Promulgen D Cetearyl Alcohol (and) Cetearth-20 ¹	2.00	2.00
Lexemul GDL Glyceryl Dilaurate ²	0.50	0.50
Cetyl Alcohol	1.50	1.50
Dow Corning 200 Fluid 350 cSt. Dimethicone	0.20	0.20
NutriLayer Phytolipids	1.00	5.00
Part C: Neutralizer		
Triethanolamine, 50% in water	0.50	0.50
Part D: Preservative		
Germaben II ³	0.50	0.50

¹Noveon ²Inolex Chemical ³International Specialty Products

Part A

- Add glycerin to water. With stirring, slowly sprinkle in carbomer. Stir for 10 minutes at room temperature and then heat to 75°C with continual stirring.

Part B

- Combine Part B ingredients.
- Heat to 80°C or until mixture is completely melted and homogeneous.
- Quickly add Part B to Part A while stirring. Continue heating and stirring at 75°C for 10 minutes. Cool to 70°C.

Part C

- While stirring combined Parts A and B, add Part C at 70°C. Increase the stirrer speed as needed to maintain good mixing without creating a vortex.
- Cool to 40°C.

Part D

- With continued stirring, add *Germaben II* to the combined Parts A, B, and C.
- Surround the beaker with a cold water or ice-water bath. Continue mixing until thoroughly mixed and cooled.

Diminished Wrinkle Appearance After Only One Week With 1% NutriLayer™ Cream



Week 0



Week 1

Eastman Chemical Company

Corporate Headquarters

P.O. Box 431
Kingsport, TN 37662-5280 U.S.A
Telephone:
USA and Canada, 800-EASTMAN
(800-327-8626)
Other Locations +1 423-229-2000
Fax: +1 423-229-1673
www.eastman.com

Eastman Chemical Latin America

9155 South Dadeland Blvd.
Suite 116
Miami, FL 33156 U.S.A.
Telephone: (1) 305-671-2800
Fax: (1) 423-229-1673

Eastman Chemical B.V.

Fascinatio Boulevard 602-614
2909 VA Capelle aan den IJssel
The Netherlands
Telephone: +31 10 2402 111
Fax: +31 10 2402 100

Eastman Chemical Japan Limited

AlG Aoyama Building 5F
2-11-16 Minami Aoyama
Minato-ku, Tokyo 107-0062 Japan
Telephone: +81 3-3475-9510
Fax: +81 3-3475-9515

Eastman Chemical Asia Pacific

Pte. Ltd.
#05-03 Winsland House 1
3 Killiney Road
Singapore 239519
Telephone: +65 6831-3100
Fax: +65 6732-4930

Material Safety Data Sheets providing safety precautions, that should be observed when handling and storing Eastman products, are available online or by request. You should obtain and review the available material safety information before handling any of these products. If any materials mentioned are not Eastman products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed.

Neither Eastman Chemical Company nor its marketing affiliates shall be responsible for the use of this information, or of any product, method or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment and for the health and safety of your employees and purchasers of your products. NO WARRANTY IS MADE OF THE MERCHANTABILITY OR FITNESS OF ANY PRODUCT, AND NOTHING HEREIN WAIVES ANY OF THE SELLER'S CONDITIONS OF SALE.

EASTMAN

NutriLayer is a trademark of Eastman Chemical Company.

© Eastman Chemical Company, 2006.

Publication CB-48C
September 2006