Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

FORMULARY
VEEGUM® *Ultra*
No. 923

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

The VEEGUM® *Ultra* Formulary

Smectite clays are the natural choice to optimize topical suspensions and emulsions. The **VEEGUM®** Magnesium Aluminum Silicate products have long been the preferred smectite clays because of their cost-effectiveness, ready availability worldwide, high level of purity, and their exceptional uniformity in properties from lot-to-lot and year-to- year.

The primary benefit of smectite clays is their ability to stabilize a dispersion of almost anything dispersed in water − lipids in emulsions, solids in suspensions, gases in foams. These clays are also rheology modifiers and "feel" improvers, overcoming the tacky, slimy or gummy nature of organic thickeners and other formula ingredients. Additionally, smectite clays are resistant to degradation by bacteria, heat, UV and shear.

Fast, Low Energy Hydration

Conventional smectite clays are alkaline in pH, and they require energy intensive hydration. **VEEGUM *Ultra*** (INCI: Magnesium Aluminum Silicate) overcomes these limitations. Designed for efficient incorporation into water, **VEEGUM *Ultra*** disperses easily and hydrates rapidly, and it is the only smectite rheological agent with an acid pH. Yet it provides all the benefits of conventional smectite clay products.

All smectite clay products must be properly dispersed in water to achieve their best performance. No other materials should be present in the water because they can interfere with proper hydration and the formation of the colloidal structure. With conventional smectite clays, the degree of clay hydration is directly proportional to the amount of energy used to disperse the product. The degree of hydration therefore increases as mixing time, mixing intensity or water temperature increase. **VEEGUM *Ultra***, however, is relatively unaffected by changes in these mixing factors. As shown in the following table, adequate hydration can be achieved quickly, even when using room temperature water and a simple, slow-speed propeller mixer.

VEEGUM® *Ultra*

Water Temperature	Mixer Type	Mixer Speed, rpm	Minimum Suggested Mixing
25°C	Homogenizer	3000	10 min.
25°C	Propeller	800	15 min.
75°C	Propeller	800	10 min.

Low pH, Bright Color

Topical products are often formulated at acid pH for optimum epidermal or active ingredient compatibility. **VEEGUM *Ultra*** is tailored for these uses because of its uniquely low pH, 4.7, and its superior stabilizing ability. It is also the whitest refined smectite available. This is dramatically evident in aqueous dispersions, which are a true bright white. Unlike many other types of clay, **VEEGUM *Ultra*** will not affect the desired whiteness or shading of emulsion or suspension products.

Synergistic with Gums and Polymers

Mixtures of **VEEGUM *Ultra*** with common organic thickeners, such as xanthan gum and cellulosics, produce rheology synergism and are often used to ensure optimum viscosity and stability, particularly at temperature extremes. Smectite clay and carbomer are frequently used in topicals, since the clay provides improved feel and high temperature stability. They are difficult to hydrate simultaneously, however, due to the tendency of the alkaline clay to prematurely thicken the polymer. The low pH of **VEEGUM *Ultra*** avoids this difficulty. Blends with carbomer disperse easily and hydrate quickly. Subsequent pH adjustments to thicken the carbomer and develop synergism can be made any time after hydration, as when carbomer is used alone.

Recommendations

VEEGUM *Ultra* is recommended as a suspension stabilizer, emulsion optimizer and thickener for all topical products. It is especially effective in products formulated at acidic pH, requiring little or no buffering while optimizing color and stability. The following formulas illustrate the effectiveness and versatility of this unique clay.

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

FORMULAS

SKIN CARE

TREATMENT

SUN CARE

GROOMING

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

PROTOTYPE FORMULA

Blue Light & Pollution Protection Lotion No. 641

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.50
	VANZAN® NF Xanthan Gum	0.50
	Water	79.00
	Avena Sativa (Oat) Kernel Extract (and) Glycerin (and) Phenoxyethanol (Tech-O® #6-090 L[1])	2.00
	Propanediol (Zemea® Propanediol[2])	5.00
	PEG-20 Methyl Glucose Sesquistearate (Glucamate® SSE-20 Emulsifier[3])	2.00
B	Methyl Glucose Sesquistearate (Glucate® SS Emulsifier[3])	2.00
	Caprylic/Capric Triglyceride (Neobee® M-5[4])	2.00
	Tocopherol (Covi-ox® T-50 C[5])	0.50
	Cetearyl Alcohol (TA-1618, Fatty Alcohol[6])	2.50
C	Preservative	q.s.
	Glycerin (and) Marrubium Vulgare Extract (Citystem®[7])	2.00
	Citric Acid, 20%	q.s.

Procedure: While heating the water to 60-65°C, slowly add the **VEEGUM® *Ultra*** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Then, add the rest of the Part A ingredients and mix well after each. Maintain the water phase at 60-65°C. Combine the Part B ingredients (oil phase) and heat to 60-65°C. Add the oil phase to the water phase with good agitation; mix until uniform. Avoid incorporating air. Cool with mixing to <30°C, then add the preservative. Check the pH of the batch both prior to and after the incorporation of the Citystem. If necessary, adjust the pH to 5.0 (± 0.25) with citric acid, each time.

RAW MATERIAL SUPPLIERS

[1]Beacon CMP Corporation, Kenilworth, NJ
[2]DuPont Tate & Lyle Bio Products Company, LLC, Wilmington, DE
[3]Lubrizol Advanced Materials, Inc., Cleveland, OH
[4]Stepan Company, Northfield, IL
[5]BASF Corporation, Florham Park, NJ
[6]Peter Cremer, Cincinnati, OH
[7]Croda, Inc., Edison, NJ

TRADEMARKS

VEEGUM and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC.
Citystem is a registered trademark of Sederma SAS France.
Covi-ox is a registered trademark of Cognis Corporation.
Glucamate and Glucate are registered trademarks of Lubrizol Advanced Materials, Inc.
Neobee is a registered trademark of Stepan Company.
Tech-O is a registered trademark of Beacon CMP Corporation.
Zemea is a registered trademark of DuPont Tate & Lyle Bio Products Company, LLC.

Rev09/17/18

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Anti-Aging Skin Cream No. 578

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	1.50
	VANZAN® NF Xanthan Gum	0.30
	Water	75.92
	Butylene Glycol	6.00
	Sucrose Stearate (Surfhope® SE Cosme C-1811[1])	3.00
B	Steareth-2 (Brij® S2[2])	1.50
	Steareth-21 (Brij® S721[2])	1.50
	Cetearyl Alcohol	3.00
	Caprylic/Capric Triglyceride (Neobee® M-5 Cosmetic[3])	2.50
	PPG-11 Stearyl Ether (Acconon® E[4])	2.50
	C12-15 Alkyl Benzoate (Finsolv® TN[5])	1.00
	Cyclmethicone (Xiameter® PMX-0345 Cyclosiloxane Blend[6])	1.00
	Cholesterol (Cholesterol NF[2])	0.10
	Linoleic Acid (Emersol® 315[7])	0.10
	Ceramide 2 (TIC-001 Ceramide 2[8])	0.025
	Ceramide 3 (Ceramide III[9])	0.025
	Ceramide 6 II (Ceramide VI[9])	0.025
C	Preservative	q.s.

Procedure: While heating the water to 85-90°C, slowly add the **VEEGUM® *Ultra*** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the butylene glycol and sucrose stearate, mixing until uniform. Maintain the water phase at 85-90°C. Blend the Part B oil phase ingredients and heat to 85-90°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool with mixing; add Part C when the emulsion is <30°C.

RAW MATERIAL SUPPLIERS

[1]Lonza, Inc., Allendale, NJ
[2]Croda, Inc., Edison, NJ
[3]Stepan Company, Northfield, IL
[4]Abitec Corporation, Columbus, OH
[5]Innospec Active Chemicals, Edison, NJ
[6]Dow Corning Corporation, Midland, MI
[7]Emery Oleochemicals, LLC, Cincinnati, OH
[8]Takasago International Corp., Rockleigh, NJ
[9]Evonik Goldschmidt Chemical Corporation, Hopewell, VA

TRADEMARKS

VEEGUM and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC.
Acconon is a registered trademark of Abitec Corporation.
Brij is a registered trademark of Uniqema Americas LLC.
Emersol is a registered trademark of Cognis Corporation.
Finsolv is a registered trademark of Innospec Performance Chemicals Company.
Neobee is a registered trademark of Stepan Company.
Surfhope is a registered trademark of Mitsubishi Chemical Corporation.
Xiameter is a registered trademark of Dow Corning Corporation.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Intensive AHA Moisturizing Lotion No. 476

		Wt.%
A	**VEEGUM® *Ultra*** or **VEEGUM EZ** Magnesium Aluminum Silicate	1.50
	VANZAN® NF Xanthan Gum	0.50
	Water	70.14
B	Glycerin	3.00
	Butylene Glycol	2.00
C	Cetyl Alcohol	1.00
	Glyceryl Monostearate SE	3.00
	Caprylic/Capric Triglyceride (Neobee® M-5[1])	5.00
	C12-15 Octanoate (Finester™ EH-25[2])	1.00
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350cs[3])	1.00
	Steareth-2 (Brij® S2[4])	0.83
	Steareth-21 (Brij® S721[4])	0.83
D	Glycolic Acid, 70%	7.00
	Triethanolamine	3.20
	Citric Acid (to pH 3.8 ± 0.2)	q.s.
E	Preservative, Fragrance	q.s.

Procedure: While heating the water to 75°C, slowly add the **VEEGUM® *Ultra*** or **VEEGUM EZ** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining water phase ingredients from Part B, mixing until uniform. Maintain the water phase at 75°C. Blend the Part C oil phase ingredients and heat to 75°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing. Add the Part D and Part E ingredients when the emulsion is <40°C. Adjust as necessary to pH 3.8 ± 0.2.

RAW MATERIAL SUPPLIERS

[1]Stepan Company, Northfield, IL
[2]Innospec Active Chemicals, Edison, NJ
[3]Dow Corning Corporation, Midland, MI
[4]Croda, Inc., Edison, NJ

TRADEMARKS

VEEGUM and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC.
Brij is a registered trademark of Uniqema Americas LLC.
Finester is a trademark of Innospec Performance Chemicals Company.
Neobee is a registered trademark of Stepan Company.
Xiameter is a registered trademark of Dow Corning Corporation.

Rev01/25/2021

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Intensive AHA Moisturizing Cream No. 484

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	1.5
	VANZAN® NF Xanthan Gum	0.3
	Water	56.6
B	Glycerin	3.4
	Butylene Glycol	2.0
C	Cetyl Alcohol	0.5
	Glyceryl Monostearate SE	3.0
	Petrolatum	10.0
	Mineral Oil	2.0
	Caprylic/Capric Triglyceride (Neobee® M-5[1])	3.0
	C12-15 Octanoate (Finester™ EH-25[2])	2.0
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350cs[3])	1.0
	Steareth-2 (Brij® S2[4])	1.5
	Steareth-21 (Brij® S721[4])	1.5
	Isosorbide Laurate	0.5
D	Lactic Acid USP, 88%	2.6
	Sodium Lactate (PATLAC™ NAL[5])	2.6
	Glycolic Acid, 70%	3.0
	Triethanolamine (to pH 3.75 ± 0.25)	3.0
E	Preservative, Fragrance	q.s.

Procedure: While heating the water to 80°C, slowly add the **VEEGUM® *Ultra*** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining water phase ingredients from Part B, mixing until uniform. Maintain the water phase at 80°C. Blend the Part C oil phase ingredients and heat to 80°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing. Add the Part D and Part E ingredients when the emulsion is <40°C. Adjust as necessary to pH 3.75 ± 0.25.

RAW MATERIAL SUPPLIERS
[1]Stepan Company, Northfield, IL
[2]Innospec Active Chemicals, Edison, NJ
[3]Dow Corning Corporation, Midland, MI
[4]Croda Inc., Edison, NJ
[5]RITA Corporation, Crystal Lake, IL

TRADEMARKS
VEEGUM and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC.
Brij is a registered trademark of Uniqema Americas LLC.
Finester is a trademark of Innospec Performance Chemicals Company.
Neobee is a registered trademark of Stepan Company.
Patlac is a trademark of Caravan Ingredients, Inc.
Xiameter is a registered trademark of Dow Corning Corporation.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Moisturizing Skin Cream No. 512

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.0
	Carbomer (Carbopol® Ultrez 10[1])	0.2
	Water	72.5
B	Glycerin	5.0
	Butylene Glycol	3.0
	Polysorbate 20 (Tween® 20[2])	1.0
C	Cetyl Alcohol	0.5
	Glyceryl Monostearate SE	3.0
	Caprylic/Capric Triglyceride (Neobee® M-5[3])	5.0
	C12-15 Octanoate (Finester™ EH-25[4])	3.0
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350cs[5])	1.0
	Steareth-2 (Brij® S2[2])	1.1
	Steareth-21 (Brij® S721[2])	1.1
	Laureth-23 (Brij® L23[2])	0.5
	Isosorbide Laurate	1.0
D	Etidronic Acid	0.1
	Triethanolamine (to pH 6.0 ± 0.5)	q.s.
E	Preservative, Fragrance	q.s.

Procedure: Begin heating the water to 75-80°C. Slowly add the **VEEGUM® *Ultra*** and carbomer sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining water phase ingredients from Part B, mixing until uniform. Maintain the water phase at 75-80°C. Blend the Part C oil phase ingredients and heat to 75-80°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing; add the Part D and Part E ingredients when the emulsion is <35°C. Adjust as necessary to pH 6.0 ± 0.5.

RAW MATERIAL SUPPLIERS

[1]Lubrizol Advanced Materials, Inc., Cleveland, OH
[2]Croda, Inc., Edison, NJ
[3]Stepan Company, Northfield, IL
[4]Innospec Active Chemicals, Edison, NJ
[5]Dow Corning Corporation, Midland, MI

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Brij and Tween are registered trademarks of Uniqema Americas LLC.
Carbopol is a registered trademark of Lubrizol Advanced Materials, Inc.
Finester is a trademark of Innospec Performance Chemicals Company.
Neobee is a registered trademark of Stepan Company.
Xiameter is a registered trademark of Dow Corning Corporation.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Barrier Cream No. 489

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	0.50
	Carbomer (Carbopol® 934[1])	0.25
	Water	88.31
B	Cetyl Alcohol	0.50
	Glyceryl Monostearate SE	2.00
	C12-15 Octanoate (Finester™ EH-25[2])	3.00
	Castor Oil/IPDI Copolymer (Polyderm™ PPI CO[3])	1.00
	Phenyl Dimethicone (DC 556 Fluid[4])	3.00
	Steareth-2 (Brij® S2[5])	0.72
	Steareth-21 (Brij® S721[5])	0.72
C	Preservative, Fragrance	q.s.
D	Triethanolamine (to pH 5.8 ± 0.3)	q.s.

Procedure: Begin heating the water to 80°C. Slowly add the **VEEGUM *Ultra*** and carbomer sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Maintain the water phase at 80°C. Blend the Part B oil phase ingredients and heat to 80°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing; add the Part C ingredients when the emulsion is < 35°C. Adjust as necessary to pH 5.8 ± 0.3.

RAW MATERIAL SUPPLIERS

[1]Lubrizol Advanced Materials, Inc., Cleveland, OH
[2]Innospec Active Chemicals, Edison, NJ
[3]Alzo International, Inc., Sayreville, NJ
[4]Dow Corning Corporation, Midland, MI
[5]Croda, Inc., Edison, NJ

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Brij is a registered trademark of Uniqema Americas LLC.
Carbopol is a registered trademark of Lubrizol Advanced Materials, Inc.
Finester is a trademark of Innospec Performance Chemicals Company.
Polyderm is a trademark of Alzo Investments.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Vitamin Enriched Barrier Cream No. 490

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	0.80
	Carbomer (Carbopol® 934[1])	0.30
	Water	79.00
B	Glycerin	2.00
	Butylene Glycol	2.00
C	Cetyl Alcohol	0.50
	Glyceryl Monostearate SE	2.00
	Caprylic/Capric Triglyceride (Neobee® M-5[2])	2.00
	C12-15 Octanoate (Finester™ EH-25[3])	2.00
	Castor Oil/IPDI Copolymer (Polyderm™ PPI CO[4])	1.00
	Phenyl Dimethicone (DC 556 Fluid[5])	3.00
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350cs[5])	1.00
	Bois Oil	0.50
	Steareth-2 (Brij® S2[6])	0.95
	Steareth-21 (Brij® S721[6])	0.95
D	Panthenol	1.00
	Vitamin E Acetate	0.50
	Vitamin A Palmitate	0.50
	Triethanolamine (to pH 5.8 ± 0.3)	q.s.
E	Preservative, Fragrance	q.s.

Procedure: Begin heating the water to 80°C. Slowly add the **VEEGUM® *Ultra*** and carbomer sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining water phase ingredients from Part B, mixing until uniform. Maintain the water phase at 80°C. Blend the Part C oil phase ingredients and heat to 80°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing; add Part D and Part E ingredients when the emulsion is <35°C. Adjust as necessary to pH 5.8 ± 0.3.

RAW MATERIAL SUPPLIERS
[1]Lubrizol Advanced Materials Inc., Cleveland, OH
[2]Stepan Company, Northfield, IL
[3]Innospec Active Chemicals, Edison, NJ
[4]Alzo International Inc., Sayreville, NJ
[5]Dow Corning Corporation, Midland, MI
[6]Croda, Inc., Edison, NJ

TRADEMARKS
VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Brij is a registered trademark of Uniqema Americas LLC.
Carbopol is a registered trademark of Lubrizol Advanced Materials, Inc.
Finester is a trademark of Innospec Performance Chemicals Company.
Neobee is a registered trademark of Stepan Company.
Polyderm is a trademark of Alzo Investments.
XIAMETER is a registered trademark of Dow Corning Corporation.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Botanical Skin Lightening Lotion No. 492

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.0
	Carbomer (Carbopol® 934[1])	0.2
	Water	69.8
B	Polysorbate 20 (Tween® 20[2])	0.6
	Glycerin	3.0
	Butylene Glycol	3.0
C	Cetyl Alcohol	0.5
	Isosorbide Laurate	1.0
	Laureth-23 (Brij® L23[2])	0.7
	Steareth-2 (Brij® S2[2])	1.1
	Steareth-21 (Brij® S721[2])	1.1
	Caprylic/Capric Triglyceride (Neobee® M-5[3])	5.0
	Glyceryl Monostearate SE	3.0
	C12-15 Octanoate (Finester™ EH-25[4])	3.0
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350cs[5])	1.0
D	Triethanolamine (to pH 6.0 ± 0.5)	3.0
	Saxifraga Sarmentosa Extract (and) Grape Extract (and) Butylene Glycol (and) Water (and) Mulberry Root Extract (and) Scultellaria Baicalensis Extract (and) Na2EDTA (Biowhite®[6])	2.0
E	Preservative, Fragrance, Chelating Agent	q.s.

Procedure: Begin heating the water to 75-80°C. Slowly add the **VEEGUM® *Ultra*** and carbomer sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the water phase ingredients from Part B, mixing until uniform. Maintain the water phase at 75-80°C. Blend the Part C oil phase ingredients and heat to 75-80°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing; when the emulsion is <45°C add the Part D and Part E ingredients in the order listed, mixing after each addition until smooth and uniform. Adjust as necessary to pH 6.0 ± 0.5.

RAW MATERIAL SUPPLIERS
[1]Lubrizol Advanced Materials Inc., Cleveland, OH
[2]Croda, Inc., Edison, NJ
[3]Stepan Company, Northfield, IL
[4]Innospec Active Chemicals, Edison, NJ
[5]Dow Corning Corporation, Midland, MI
[6]BASF Corporation, Florham Park, NJ

TRADEMARKS
VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Biowhite is a registered trademark of BASF Beauty Care Solutions.
Brij and Tween are registered trademarks of Uniqema Americas LLC.
Carbopol is a registered trademark of Lubrizol Advanced Materials, Inc.
Finester is a trademark of Innospec Performance Chemicals Company.
Neobee is a registered trademark of Stepan Company.
Xiameter is a registered trademark of Dow Corning Corporation.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Licorice Extract Fade Lotion No. 604

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	1.5
	Water	65.8
	Propanediol (Zemea® Propanediol[1])	5.0
	Disodium EDTA	0.2
	Panthenol and Propylene Glycol (D-Panthenol 50-P[2])	0.4
B	White Petrolatum	5.0
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350cs[3])	1.0
	Polyglyceryl-3 Distearate (Cremophor® GS 32[2])	3.0
	Ceteareth-25 (Cremophor® A 25[2])	1.5
	Cetearyl Alcohol	3.0
	Tocopherol Acetate (Vitamin E Acetate USP/EP/FCC[2])	0.5
	Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165[4])	2.0
	Ethyl Hexyl Methoxycinnamate (Neo Heliopan® AV[5])	7.5
C	Glycyrrhizza Glabra (Licorice) Root Extract (Licorice Extract CG 4%[6])	0.5
	Ethanol, USP	3.0
D	Retinyl Palmitate (Vitamin A Palmitate PH. EUR/USP/FCC[2])	0.1
E	Preservative	q.s.
	Triethanolamine, 99%	q.s.

Procedure: While heating the water to 70-75ºC, slowly add the **VEEGUM® *Ultra*** while agitating at maximum available shear. Mix until fully hydrated. Add the remaining Part A water phase ingredients. Maintain the water phase at 70-75ºC. Combine the Part B oil phase ingredients and heat to 70-75ºC. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing to 40-45°C. Dissolve the licorice extract in the ethanol under agitation and then add Part C to the emulsion; mix until uniform. Warm the retinyl palmitate to liquefy and make uniform prior to weighing out. Add the retinyl palmitate and the preservative in order to the emulsion, mixing after each addition until uniform. Adjust as necessary to pH 6.0 ± 0.5.

RAW MATERIAL SUPPLIERS
[1]DuPont Tate & Lyle Bio Products Company, LLC, Wilmington, DE
[2]BASF Corporation, Florham Park, NJ
[3]Dow Corning Corporation, Midland, MI
[4]Croda, Inc., Edison, NJ
[5]Symrise, Teterboro, NJ
[6]Sabinsa Corporation, Piscataway, NJ

TRADEMARKS
VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Arlacel is a registered trademark of Uniqema Americas LLC.
Cremophor is a registered trademark of BASF Aktiengesellschaft.
Neo Helipan is a registered trademark of Haarmann & Reimer GmbH.
Xiameter is a registered trademark of Dow Corning Corporation.
Zemea is a registered trademark of DuPont Tate & Lyle Bio Products Company, LLC.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Salicylic Acid Acne Treatment Cream No. 610

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.5
	VANZAN® NF Xanthan Gum	0.5
	Water	73.4
	Etidronic Acid	0.1
	Propanediol (Zemea® Propanediol[1])	5.0
B	Salicylic Acid – USP	1.0
	Steareth-21 (Brij® S721[2])	1.5
	Steareth-2 (Brij® S2[2])	3.5
	Cetearyl Alcohol (Protachem™ CS-50[3])	1.5
	Stearic Acid (Pristerene® 9559[2])	2.0
	PPG-15 Stearyl Ether (Arlamol® PS15E[2])	8.0
	Dimethicone (Xiameter® PMX-200 Silicone Fluid 350cs[4])	1.0
C	Preservative	q.s.
	Triethanolamine (Adj. pH to 3.8±0.2)	q.s.

Procedure: While heating the water to 80-85°C, slowly add the **VEEGUM® *Ultra*** and **VANZAN® NF** sequentially or as a dry blend while mixing at maximum available shear. Continue mixing until fully hydrated. Add the etidronic acid and propanediol in order, mixing after each addition until uniform. Maintain the water phase at 80-85°C. Combine the Part B oil phase ingredients and heat to 80-85°C. Add Part B to Part A slowly with adequate mixing; homogenize. Cool gradually while mixing. Add the preservative when the emulsion is <30°C, then adjust the pH to 3.8 ± 0.20 with triethanolamine.

RAW MATERIAL SUPPLIERS

[1]DuPont Tate & Lyle Bio Products Company, LLC, Wilmington, DE
[2]Croda, Inc., Edison, NJ
[3]Protameen, Totowa, NJ
[4]Dow Corning Corporation, Midland, MI

TRADEMARKS

VEEGUM and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC.
Arlamol and Brij are registered trademarks of Uniqema Americas LLC.
Pristerene is a registered trademark of Unichema Chemie B.V.
Protachem is a trademark Protameen Chemicals, Inc.
Xiameter is a registered trademark of Dow Corning Corporation.
Zemea is a registered trademark of DuPont Tate & Lyle Bio Products Company, LLC.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

AHA Clay Mask No. 486

		Wt.%
A	**VEEGUM® *Ultra*** or **VEEGUM EZ** Magnesium Aluminum Silicate	5.00
	Water	38.25
B	Glycerin	3.00
	Butylene Glycol	3.00
	Cosmetic Kaolin Clay	30.00
	Cosmetic Talc	5.00
	Sodium Lauroyl Sarcosinate, 30%	5.00
C	Glycolic Acid, 70%	7.00
D	Triethanolamine	3.75
	Citric Acid (to pH 4.0 ± 0.2)	q.s.
E	Preservative, Fragrance	q.s.

Procedure: Add the **VEEGUM® *Ultra*** or **VEEGUM EZ** to the water vortex while agitating at maximum available shear. Continue mixing until fully hydrated. Add the remaining ingredients in the order listed, mixing after each addition until smooth.

Rev01/25/2021

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

AHA Clay Mask No. 487

		Wt.%
A	**VEEGUM®** ***Ultra*** Magnesium Aluminum Silicate	5.0
	Water	38.9
B	Glycerin	5.0
	Butylene Glycol	3.0
	Kaolin Clay, Cosmetic Grade	30.0
	Talc, Cosmetic Grade	5.0
	Sodium Lauroyl Sarcosinate, 30%	5.0
	Glycolic Acid, 70%	5.0
	d-Panthenol	0.5
	Vitamin E Acetate	0.1
	Vitamin A Palmitate	0.1
	Triethanolamine	2.4
	Preservative	q.s.

Procedure: Slowly add the **VEEGUM®** ***Ultra*** to the water agitated at maximum available shear. Mix until fully hydrated. Add the Part B ingredients in order, mixing after each addition until smooth.

Rev06/03/2016

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Mosquito Repellant Cream No. 457

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	0.4
	Carbomer (Carbopol® 940[1])	0.4
	Water	79.2
B	N,N-Diethyl-m-Toluamide	15.0
	Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165[2])	5.0
C	Sodium Hydroxide Solution to pH 5.5	q.s.
D	Preservative	q.s.

Procedure: Begin heating the water to 50-55°C. Slowly add the **VEEGUM® *Ultra*** and carbomer sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Maintain Part A at 50-55°C. Heat Part B to 50-55°C. Add Part A to Part B with good agitation. Cool with mixing; add the sodium hydroxide and preservative when the emulsion is <35°C.

RAW MATERIAL SUPPLIERS
[1]Lubrizol Advanced Materials, Inc., Cleveland, OH
[2]Croda, Inc., Edison, NJ

TRADEMARKS
VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Arlacel is a registered trademark of Uniqema Americas LLC.
Carbopol is a registered trademark of Lubrizol Advanced Materials, Inc.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

BB Cream No. 617

		Wt.%
A	**VEEGUM® *Ultra*** or **VEEGUM EZ** Magnesium Aluminum Silicate	1.50
	Water	59.62
	Propanediol (Zemea® Propanediol[1])	5.00
	Disodium EDTA	0.20
	Panthenol and Propylene Glycol (D-Panthenol 50-P[2])	0.40
B	Yellow Iron Oxide (SunCROMA® Yellow Iron Oxide (C33-210)[3])	0.40
	Red Iron Oxide (SunCROMA® Red Iron Oxide (C33-128)[3])	0.10
	Black Iron Oxide (SunCROMA® Black Iron Oxide (C33-5000)[3])	0.03
	Titanium Dioxide (SunCROMA® Titanium Dioxide (C47051)[3])	3.50
C	Crambe Abyssinica Seed Oil (Fancor® Abyssinian Oil[4])	2.50
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350cs[5])	1.00
	Polyglyceryl-3 distearate (Cremophor® GS 32[2])	3.10
	Ceteareth-25 (Eumulgin® B25 (NA)[2])	1.50
	Cetearyl Alcohol	3.00
	Glyceryl Stearate (and) PEG-100 Stearate (SP Arlacel® 165-MBAL-PA-(MH)[6])	2.00
	Ethyl Hexyl Methoxycinnamate (Neo Heliopan® AV[7])	7.50
	Mica (Sericite GMS-4C[8])	3.00
D	Mica (and) Titanium Dioxide (and) Ethylene/Methacrylate Copolymer (and) Isopropyl Titanium Triisostearate (SPC/KTZ Interval Gold-12[8])	0.15
E	Preservative	q.s.
	Lactobacillus/Salix Alba Bark Ferment Filtrate (Prorevive BB Complex[9])	5.50
	Triethanolamine, 99%	q.s.

Procedure: While heating the water to 70-75°C, slowly add the **VEEGUM® *Ultra*** or **VEEGUM EZ** while agitating at maximum available shear. Mix until fully hydrated. Add the remaining Part A water phase ingredients. Combine the Part B ingredients, then add to Part A and mix until smooth. Maintain the water phase at 70-75°C. Combine the Part C, oil phase ingredients and heat to 70-75°C. Add the oil phase to the water phase with good agitation; mix until uniform. Switch to low shear mixing, then add the SPC/KTZ Interval Gold-12 (Part D). Cool while mixing to 30-35°C, then add the preservative followed by the Prorevive BB Complex to the emulsion, mixing after each addition until uniform. Adjust as necessary to pH 6.0 ± 0.5 with triethanolamine.

RAW MATERIAL SUPPLIERS

[1]DuPont Tate & Lyle Bio Products Company, LLC, Wilmington, DE
[2]BASF Corporation, Florham Park, NJ
[3]Sun Chemical Corp., Parsippany, NJ
[4]Elementis Specialties, Hightstown, NJ
[5]Dow Corning Corporation, Midland, MI
[6]Croda, Inc., Edison, NJ
[7]Symrise, Teterboro, NJ
[8]Kobo Products, Inc., South Plainfield, NJ
[9]Active Concepts, LLC, Lincolnton, NC

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Arlacel is a registered trademark of Uniqema Americas LLC.
Cremophor is a registered trademark of BASF Aktiengesellschaft.
Eumulgin is a registered trademark of Cognis IP Management GMBH Corporation.
Fancor is a registered trademark of Elementis Specialties, Inc.
Neo Heliopan is a registered trademark of Haarmann & Reimer GmbH.
Suncroma is a registered trademark of Sun Chemical Corporation.
Xiameter is a registered trademark of Dow Corning Corporation.
Zemea is a registered trademark of DuPont Tate & Lyle Bio Products Company, LLC.

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

CC Cream No. 618

		Wt.%
A	**VEEGUM® *Ultra*** or **VEEGUM EZ** Magnesium Aluminum Silicate	1.50
	Water	61.27
	Propanediol (Zemea® Propanediol[1])	5.00
	Disodium EDTA	0.20
	Panthenol and Propylene Glycol (D-Panthenol 50-P[2])	0.40
B	Yellow Iron Oxide (SunCROMA® Yellow Iron Oxide (C33-210)[3])	0.40
	Red Iron Oxide (SunCROMA® Red Iron Oxide (C33-128)[3])	0.10
	Black Iron Oxide (SunCROMA® Black Iron Oxide (C33-5000)[3])	0.03
	Titanium Dioxide (SunCROMA® Titanium Dioxide (C47051)[3])	3.50
C	Crambe Abyssinica Seed Oil (Fancor® Abyssinian Oil[4])	2.50
	Dimethicone (Xiameter® PMX-200 Silicone Fluid 350cs[5])	1.00
	Polyglyceryl-3 distearate (Cremophor® GS 32[2])	3.00
	Ceteareth-25 (Eumulgin® B25 (NA)[2])	1.50
	Cetearyl alcohol	3.00
	Tocopherol Acetate (Vitamin E Acetate Care DL-alpha-Tocopherol acetate[2])	0.50
	Glyceryl Stearate (and) PEG-100 Stearate (SP Arlacel® 165-MBAL-PA-(MH)[6])	2.00
	Ethyl Hexyl Methoxycinnamate (Neo Heliopan® AV[7])	7.50
	Mica (Sericite GMS-4C[8])	3.00
D	Glycyrrhizza Glabra (Licorice) Root Extract (Licorice Extract CG 4%[9])	0.50
	Ethanol, USP	3.00
E	Retinyl Palmitate (Vitamin A Palmitate 1.7 Mio I.E./g[2])	0.10
F	Preservative	q.s.
	Triethanolamine, 99%	q.s.

Procedure: While heating the water to 70-75°C, slowly add the **VEEGUM® *Ultra*** or **VEEGUM EZ** while agitating at maximum available shear. Mix until fully hydrated. Add the remaining Part A water phase ingredients. Combine the Part B ingredients, then add to Part A and mix until smooth. Maintain the water phase at 70-75°C. Combine the Part C, oil phase ingredients and heat to 70-75°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing to 40-45°C. Dissolve the licorice extract in the ethanol under agitation and then add Part D to the emulsion. Warm the retinyl palmitate to liquefy and make uniform prior to weighing out. Add the retinyl palmitate and mix until uniform. Continue to cool while mixing to 30-35°C, then add the preservative. Mix until uniform. Adjust as necessary to pH 6.0 ± 0.5 with triethanolamine.

RAW MATERIAL SUPPLIERS

[1]DuPont Tate & Lyle Bio Products Company, LLC, Wilmington, DE
[2]BASF Corporation, Florham Park, NJ
[3]Sun Chemical Corp., Parsippany, NJ
[4]Elementis Specialties, Hightstown, NJ
[5]Dow Corning Corporation, Midland, MI
[6]Croda, Inc., Edison, NJ
[7]Symrise, Teterboro, NJ
[8]Kobo Products, Inc., South Plainfield, NJ
[9]Sabinsa Corporation, Piscataway, NJ

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Arlacel is a registered trademark of Uniqema Americas, LLC.
Cremophor is a registered trademark of BASF Aktiengesellschaft.
Eumulgin is a registered trademark of Cognis IP Management GMBH Corporation.
Fancor is a registered trademark of Elementis Specialties, Inc.
Neo Heliopan is a registered trademark of Symrise AG.
Suncroma is a registered trademark of Sun Chemical Corporation.
Xiameter is a registered trademark of Dow Corning Corporation.
Zemea is a registered trademark of DuPont Tate & Lyle Bio Products Company, LLC.

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Leg Makeup No. 623

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.00
	VANZAN® NF Xanthan Gum	0.50
	Water	71.26
	Propanediol (Zemea® Propanediol[1])	5.00
B	Yellow Iron Oxide (SunCROMA® Yellow Iron Oxide (C33-210)[2])	1.00
	Red Iron Oxide (SunCROMA Red Iron Oxide (C33-128)[2])	0.26
	Black Iron Oxide (SunCROMA Black Iron Oxide (C33-5000)[2])	0.08
	Talc (Imperial™ 1886L BC[3])	4.30
	Titanium Dioxide (and) Cellulose (and) Alumina (C2-5 TiO2 CR-50[4])	5.00
C	Isocetyl Alcohol (Jeecol® ICA[5])	3.00
	Ethyl Hexyl Methoxycinnamate (Escalol® 557[6])	3.00
	Mineral Oil (and) Lanolin Alcohol (Vilvanolin™ L101[7])	2.00
	DEA-Oleth-3 Phosphate (Crodafos™ O3D-LQ-MH[8])	2.20
D	Polyvinypyrrolidone (PVP K-90[6])	0.40
E	Preservative	q.s.

Procedure: Slowly add the **VEEGUM® *Ultra*** and **VANZAN® NF** sequentially or as a dry blend to the water, agitated at maximum available shear. Mix until fully hydrated. Then add the propanediol. Mix Part B and grind if necessary to break apart agglomerates until homogenous. Add Part B to Part A with mixing. Mix until uniform. Blend the Part C, oil phase ingredients and continue mixing until transfer. Add the Part C, oil phase to the water phase with good agitation; mix until uniform. Add Part D and mix until uniform. Switch to low shear mixing and cool while mixing to ~30°C. Add Part E and mix until uniform.

RAW MATERIAL SUPPLIERS
[1]DuPont Tate & Lyle Bio Products Company, LLC, Willmington, DE
[2]Sun Chemicals Corporation, Parsippany, NJ
[3] Brenntag Specialties, Inc., South Plainfield, NJ
[4]Kobo Products, Inc., South Plainfield, NJ
[5]Jeen, Fairfield, NJ
[6]Ashland Specialty Ingredients, Wilmington, DE
[7]Lubrizol Advanced Materials, Inc., Cleveland, OH
[8]Croda Inc., Edison, NJ

TRADEMARKS
VEEGUM and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC.
Crodafos is a trademark of Croda, Inc.
Escalol is a registered trademark of ISP Investments, Inc.
Imperial is a trademark of Imerys Talc America, Inc.
Jeecol is a registered trademark of Jeen International Corporation.
SunCROMA is a registered trademark of Sun Chemicals Corporation.
Vilvanolin is a trademark of Lubrizol Advanced Materials, Inc.
Zemea is a registered trademark of DuPont Tate & Lyle Bio Products Company, LLC.

Rev11/29/2017

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Water-Resistant Sunscreen Lotion No. 494

		Wt.%
A	**VEEGUM® *Ultra*** or **VEEGUM EZ** Magnesium Aluminum Silicate	2.0
	Carbomer (Ultrez™ 10[1])	0.2
	Water	64.6
B	Glycerin	3.0
	Butylene Glycol	3.0
C	Cetyl Alcohol	1.0
	Isosorbide Laurate	1.0
	Glyceryl Monostearate SE	3.0
	C12-15 Octanoate (Finester™ EH-25[2])	5.0
	Octylmethoxycinnamate (Parsol® MCX[3])	7.5
	Avobenzone (Parsol® 1789[3])	2.0
	Castor Oil/IPDI Copolymer (Polyderm™ PPI-CO[4])	1.0
	Phenyl Dimethicone (DC 556 Fluid[5])	3.0
	Steareth-2 (Brij® S2[6])	1.8
	Steareth-21 (Brij® S721[6])	1.8
D	Disodium EDTA	0.1
E	Triethanolamine (to pH 6.0±0.5)	q.s.
	Preservative, Fragrance	q.s.

Procedure: Begin heating the water phase to 75°C. Slowly add the **VEEGUM® *Ultra*** or **VEEGUM EZ** and carbomer sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the water phase ingredients from Part B, mixing until uniform. Maintain the water phase at 75°C. Blend the oil phase ingredients of Part C and heat to 75°C. Add the oil phase to the water phase with high shear mixing. Mix at reduced speed while cooling to 45°C; then add Part D followed by Part E. Adjust as necessary to pH 6.0 ± 0.5.

RAW MATERIAL SUPPLIERS

[1]Lubrizol Advanced Materials, Inc., Cleveland, OH
[2]Innospec Active Chemicals, Edison, NJ
[3]Givaudan Corporation, Teaneck, NJ
[4]Alzo International, Inc., Sayreville, NJ
[5]Dow Corning Corporation, Midland, MI
[6]Croda, Inc., Edison, NJ

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Brij is a registered trademark of Uniqema Americas LLC.
Finester is a trademark of Innospec Performance Chemicals Company.
Parsol is a registered trademark of Givaudan Corporation.
Polyderm is a trademark of Alzo Investments.
Ultrez is a trademark of Noveon IP Holdings.

Rev01/25/2021

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Micro-TiO_2 Sunscreen Cream No. 513

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.0
	Carbomer (Ultrez™ 10[1])	0.2
	Water	52.5
B	Polysorbate 20 (Tween® 20[2])	1.0
	Aqua (and) Titanium Dioxide (and) Alumina (and) Silica (and) Sodium Polyacrylate (and) Propylene Glycol (and) Diazolidinyl Urea (and) Methyl Paraben (and) Propyl Paraben (Tioveil® AQ-G[2])	25.0
	Butylene Glycol	3.0
C	Cetyl Alcohol	0.5
	Isosorbide Laurate	1.0
	Caprylic/Capric Triglyceride (Neobee® M-5[3])	5.0
	Glyceryl Monostearate SE	3.0
	C12-15 Octanoate (Finester™ EH-25[4])	3.0
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350 cs[5])	1.0
	Laureth-23 (Brij® L23[2])	0.5
	Steareth-2 (Brij® S2[2])	1.1
	Steareth-21 (Brij® S721[2])	1.1
D	Etidronic Acid	0.1
E	Triethanolamine (to pH 6.0±0.5)	q.s.
	Preservative, Fragrance	q.s.

Procedure: Begin heating the water phase to 80°C. Slowly add the **VEEGUM® *Ultra*** and carbomer sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the water phase ingredients from Part B, mixing until uniform. Maintain the water phase at 80°C. Blend the oil phase ingredients of Part C and heat to 80°C. Add the oil phase to the water phase with high shear mixing. Mix at reduced speed while cooling to 45°C; then add Part D followed by Part E. Adjust as necessary to pH 6.0±0.5.

RAW MATERIAL SUPPLIERS
[1]Lubrizol Advanced Materials Inc., Cleveland, OH
[2]Croda Inc., Edison, NJ
[3]Stepan Company, Northfield, IL
[4]Innospec Active Chemicals, Edison, NJ
[5]Dow Corning Corporation, Midland, MI

TRADEMARKS
VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Brij and Tween are registered trademarks of Uniqema Americas LLC.
Finester is a trademark of Innospec Performance Chemicals Company.
Neobee is a registered trademark of Stepan Company.
Tioveil is a registered trademark of Acma Limited Corporation.
Ultrez is a trademark of Noveon IP Holdings.
Xiameter is a registered trademark of Dow Corning Corporation.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Physical, Chemical UV Protection Cream No. 514

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.0
	Carbomer (Ultrez™ 10[1])	0.2
	Water	51.4
B	Polysorbate 20 (Tween® 20[2])	1.0
	Aqua (and) Titanium Dioxide (and) Alumina (and) Silica (and) Sodium Polyacrylate (and) Propylene Glycol (and) Diazolidinyl Urea (and) Methyl Paraben (and) Propyl Paraben (Tioveil® AQ-G[2])	12.5
	Butylene Glycol	3.0
C	Cetyl Alcohol	0.5
	Isosorbide Laurate	1.0
	Caprylic/Capric Triglyceride (Neobee® M-5[3])	5.0
	Glyceryl Monostearate SE	3.0
	C12-15 Octanoate (Finester™ EH-25[4])	3.0
	Octylmethoxycinnamate (Parsol® MCX[5])	7.0
	Avobenzone (Parsol® 1789[5])	2.0
	Octyl Salicylate (Dermoblock™ OS[6])	3.0
	Dimethicone (Xiameter® PMX-200 Silicone Fluid 350cs[7])	1.0
	Laureth-23 (Brij® L23[2])	0.5
	Steareth-2 (Brij® S2[2])	1.9
	Steareth-21 (Brij® S721[2])	1.9
D	Etidronic Acid	0.1
E	Triethanolamine (to pH 6.0±0.5)	q.s.
	Preservative, Fragrance	q.s.

Procedure: Begin heating the water phase to 80°C. Slowly add the **VEEGUM® *Ultra*** and carbomer sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the water phase ingredients from Part B, mixing until uniform. Maintain the water phase at 80°C. Blend the oil phase ingredients of Part C and heat to 80°C. Add the oil phase to the water phase with high shear mixing. Mix at reduced speed while cooling to 45°C and then add Part D followed by Part E. Adjust as necessary to pH 6.0 ± 0.5.

Note: The combination of TiO2 and Avobenzone is not approved for use in the USA.

RAW MATERIAL SUPPLIERS

[1]Lubrizol Advanced Materials, Inc., Cleveland, OH
[2]Croda, Inc., Edison, NJ
[3]Stepan Company, Northfield, IL
[4]Innospec Active Chemicals, Edison, NJ
[5]Givaudan Corporation, Teaneck, NJ
[6]Alzo International, Inc., Sayreville, NJ
[7]Dow Corning Corporation, Midland, MI

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Brij and Tween are registered trademarks of Uniqema Americas LLC.
Dermoblock is a trademark of Alzo International, Inc.
Finester is a trademark of Innospec Performance Chemicals Company.
Neobee is a registered trademark of Stepan Company.
Parsol is a registered trademark of Givaudan Corporation.
Tioveil is a registered trademark of Acma Limited Corporation.
Ultrez is a trademark of Noveon IP Holdings.
Xiameter is a registered trademark of Dow Corning Corporation.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Sun Protection Cream No. 566

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	1.0
	Water	57.8
	Glycerin, 96%	2.7
	Zinc Oxide (Zinc Oxide Neutral[1])	10.0
B	Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165[2])	4.0
	Ceteareth-20 (Eumulgin® B-2[3])	1.0
	Cetearyl Alcohol	3.0
	Caprylic/Capric Triglyceride (Neobee® M-5[4])	4.0
	Dicaprylyl Ether (Cetiol® OE[3])	3.0
	Dimethicone (Xiameter® PMX-200 Silicone Fluid 350cs[5])	1.0
	Octyl Salicylate (Neo Heliopan® OS[1])	5.0
	Octyl Methoxycinnamate (Neo Helipan® AV[1])	7.5
C	Preservative, Fragrance	q.s.

Procedure: Begin heating the water to 75-80°C. Slowly add the **VEEGUM® *Ultra*** to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining water phase ingredients; mix until the zinc oxide is uniformly dispersed. Maintain the water phase at 75-80°C. Heat Part B to 75-80°C. Add Part B to Part A; homogenize for 5 minutes at 75-80°C. Cool while mixing slowly to 40°C. Add Part C and mix until homogeneous.

RAW MATERIAL SUPPLIERS

[1]Symrise, Teterboro, NJ
[2]Croda, Inc., Edison, NJ
[3]BASF Care Creations, Florham Park, NJ
[4]Stepan Company, Northfield, IL
[5]Dow Corning Corporation, Midland, MI

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Arlacel is a registered trademark of Uniqema Americas LLC.
Cetiol and Eumulgin are registered trademarks of Cognis GmbH Corporation.
Neobee is a registered trademark of Stepan Company.
Neo Heliopan is a registered trademark of Haarmann & Reimer GmbH.
Xiameter is a registered trademark of Dow Corning Corporation.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Wash-Off Resistant Sunscreen Cream No. 515

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.0
	Carbomer (Ultrez™ 10[1])	0.2
	Water	46.8
B	Polysorbate 20 (Tween® 20[2])	1.0
	Aqua (and) Titanium Dioxide (and) Alumina (and) Silica (and) Sodium Polyacrylate (and) Propylene Glycol (and) Diazolidinyl Urea (and) Methyl Paraben (and) Propyl Paraben (Tioveil® AQ-G[2])	12.5
	Butylene Glycol	3.0
C	Cetyl Alcohol	0.5
	Isosorbide Laurate	1.0
	Caprylic/Capric Triglyceride (Neobee® M-5[3])	5.0
	Glyceryl Monostearate SE (Cutina® GMS SE[4])	3.0
	C12-15 Octanoate (Finester™ EH-25[5])	3.0
	Octylmethoxycinnamate (Parsol® MCX[6])	7.0
	Avobenzone (Parsol® 1789[6])	2.0
	Octyl Salicylate (Dermoblock™ OS[7])	3.0
	Castor Oil/IPDI Copolymer (Polyderm™ PPI-CO[7])	1.0
	Phenyl Dimethicone (DC 556 Fluid[8])	3.0
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350cs[8])	1.0
	Laureth-23 (Brij® L23[2])	0.5
	Steareth-2 (Brij® S2[2])	2.2
	Steareth-21 (Brij® S721[2])	2.2
D	Etidronic Acid	0.1
E	Triethanolamine (to pH 6.0±0.5)	q.s.
	Preservative	q.s.

Procedure: Begin heating the water to 80°C. Slowly add the **VEEGUM® *Ultra*** and carbomer sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining water phase ingredients from Part B, mixing until uniform. Maintain the water phase at 80°C. Blend the Part C oil phase ingredients and heat to 85°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool with mixing; add the Part D and Part E ingredients when the emulsion is <45°C. Adjust as necessary to pH 6.0±0.5.

Note: The combination of TiO2 and Avobenzone is not approved for use in the USA.

RAW MATERIAL SUPPLIERS

[1]Lubrizol Advanced Materials, Inc., Cleveland, OH
[2]Croda, Inc., Edison, NJ
[3]Stepan Company, Northfield, IL
[4]BASF Care Creations, Florham Park, NJ
[5]Innospec Active Chemicals, Edison, NJ
[6]Givaudan Corporation, Teaneck, NJ
[7]Alzo International, Inc., Sayreville, NJ
[8]Dow Corning Corporation, Midland, MI

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Brij and Tween are registered trademarks of Uniqema Americas LLC.
Cutina is a registered trademark of Cognis IP Management GmbH.
Dermoblock is a trademark of Alzo International, Inc.
Finester is a trademark of Innospec Performance Chemicals Company.
Neobee is a registered trademark of Stepan Company.
Parsol is a registered trademark of Givaudan Corporation.
Polyderm is a trademark of Alzo Investments.
Tioveil is a registered trademark of Acma Limited Corporation.
Ultrez is a trademark of Noveon IP Holdings.
Xiameter is a registered trademark of Dow Corning Corporation.

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Rich Body Butter Plus Sunscreen No. 603

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	1.0
	VANZAN® NF Xanthan Gum	0.5
	Water	58.5
	Glycerin	3.0
	Sorbeth-30	2.0
B	C12-15 Alkyl Benzoate (Finsolv® TN[1])	2.0
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350 cs[2])	1.0
	Soybean (Glycine Soja) Oil (Super Refined® Soybean USP[3])	2.5
	Butyrospermum Parkii (Shea) Butter (Tomasa Shea Butter[4])	3.5
	Isopropyl Myristate (and) Glycine Soja (Soybean) Oil (and) Retinyl Palmitate (and) Carthamus Tinctorius (Safflower) Seed Oil (and) Linoleic Acid (and) Tocopherol (Vitamin Complex AEF OS[3])	1.0
	Stearyl Alcohol (Lanette® 18[5])	5.0
	Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165[3])	5.0
	C12-15 Alkyl Benzoate (and) Titanium Dioxide (and) Aluminum Stearate (and) Polyhydroxystearic Acid (and) Alumina (Solaveil® CT-100[3])	15.0
C	Preservative	q.s.

Procedure: While heating the water to 70-75°C, slowly add the **VEEGUM® *Ultra*** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining water phase ingredients, mixing until uniform. Maintain the water phase at 70-75°C. Combine Part B ingredients and heat to 70-75°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool with mixing; add Part C when the emulsion is <30°C. If necessary, adjust the pH to 6.5 ± 0.5.

RAW MATERIAL SUPPLIERS
[1]Innospec Active Chemicals, Edison, NJ
[2]Dow Corning Corporation, Midland, MI
[3]Croda, Inc., Edison, NJ
[4]Tri-K Industries, Inc., Northvale, NJ
[5]BASF Care Creations, Florham Park, NJ

TRADEMARKS
VEEGUM and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC.
Arlacel is a registered trademark of Uniqema Americas LLC.
Finsolv is a registered trademark of Innospec Performance Chemicals Company.
Lanette is a registered trademark of Cognis IP Management GmbH.
Solaveil is a registered trademark of Croda International PLC.
Super Refined is a registered trademark of Croda, Inc.
Xiameter is a registered trademark of Dow Corning Corporation.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Moisturizing Lotion with Sunscreen No. 567

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	1.0
	Water	77.3
	Glycerin, 96%	2.7
	Zinc Oxide (Zinc Oxide Neutral[1])	2.0
B	Glyceryl Stearate (and) Ceteareth-20 (and) Ceteareth-12 (and) Cetearyl Alcohol (and) Cetyl Palmitate (Emulgade® SE-PF[2])	6.0
	Glyceryl Stearate (Kessco™ GMS Pure[3])	2.0
	Caprylic/Capric Triglyceride (Neobee® M-5[3])	5.0
	Mineral Oil, USP/NF Grade	2.0
	Octyl Methoxycinnamate (Neo Heliopan® AV[1])	2.0
C	Preservative, Fragrance	q.s.

Procedure: While heating the water to 85°C, slowly add the **VEEGUM® *Ultra*** while mixing at maximum available shear. Mix until fully hydrated. Add the remaining water phase ingredients, mixing until the zinc oxide is uniformly dispersed. Maintain the water phase at 85°C. Blend the Part B oil phase ingredients and heat to 85°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool with mixing; add the Part C ingredients when the emulsion is <30°C.

RAW MATERIAL SUPPLIERS

[1]Symrise, Teterboro, NJ
[2]BASF Care Creations, Florham Park, NJ
[3]Stepan Company, Northfield, IL

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Emulgade is a registered trademark of Cognis GmbH Corporation.
Kessco is a trademark of Stepan Company.
Neobee is a registered trademark of Stepan Company.
Neo Heliopan is a registered trademark of Haarmann & Reimer GmbH.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Moisturizing Cream with Sunscreen No. 568

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	1.5
	Water	74.5
	Glycerin, 96%	4.0
	Zinc Oxide (Zinc Oxide Neutral[1])	2.0
B	Emulsifying Wax NF (Polawax™ NF[2])	12.0
	PPG-2 Myristyl Ether Propionate (Crodamol™ PMP[2])	4.0
	Octyl Methoxycinnamate (Neo Heliopan® AV[1])	2.0
C	Preservative	q.s.

Procedure: While heating the water to 75-80°C, slowly add the **VEEGUM® *Ultra*** while mixing at maximum available shear. Mix until fully hydrated. Add the remaining water phase ingredients, mixing until the zinc oxide is uniformly dispersed. Maintain the water phase at 75-80°C. Blend the Part B oil phase ingredients and heat to 75-80°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool with mixing; add Part C when the emulsion is <30°C.

RAW MATERIAL SUPPLIERS

[1]Symrise, Teterboro, NJ
[2]Croda, Inc., Edison, NJ

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Crodamol and Polawax are trademarks of Croda, Inc.
Neo Heliopan is a registered trademark of Haarmann & Reimer GmbH.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Water-Resistant Sport Tint No. 453

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	1.60
	VANZAN® NF Xanthan Gum	0.40
	Water	70.40
	Propylene Glycol	5.00
B	Iron Oxides	0.67
	Manganese Violet	0.10
	Talc	4.27
	Titanium Dioxide	6.96
C	Isocetyl Alcohol	3.00
	Octyl Methoxycinnamate (Neo Heliopan® AV[1])	3.00
	Mineral Oil (and) Lanolin Alcohol (Ritachol®[2])	2.00
	DEA-Oleth-3 Phosphate (Crodafos™ O3D[3])	2.20
D	PVP (PVP K-90[4])	0.40
	Preservative, Fragrance	q.s.

Procedure: Slowly add the **VEEGUM® *Ultra*** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the propylene glycol. Blend Part B thoroughly; grind if necessary. Slowly add Part B to Part A and mix until smooth and uniform. Blend Part C ingredients and add to Part A & B; mix until homogeneous. Add Part D ingredients in order, mixing until smooth and uniform.

RAW MATERIAL SUPPLIERS
[1]Symrise, Teterboro, NJ
[2]RITA Corporation, Crystal Lake, IL
[3]Croda Inc., Edison, NJ
[4]Ashland Specialty Ingredients, Wilmington, DE

TRADEMARKS
VANZAN and **VEEGUM** are registered trademarks of Vanderbilt Minerals, LLC.
Crodafos is a trademark of Croda, Inc.
Neo Heliopan is a registered trademark of Haarmann & Reimer GmbH.
Ritachol is a registered trademark of RITA Corporation.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Liquid Hand Soap with Triclosan No. 547

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.0
	Water	61.7
B	Sodium Hydroxide	1.0
	Water	15.0
C	Cocoyl Sarcosine	20.0
	Triclosan (Irgasan® DP-300 Bacteriostat[1])	0.3
D	Preservative, Fragrance	q.s.

Procedure: Slowly add the **VEEGUM® *Ultra*** to the water while mixing at maximum available shear. Mix until fully hydrated. Dissolve the NaOH in the water to make Part B. Dissolve the Triclosan in the cocoyl sarcosine to make Part C. Add Part B to Part A; stir for 1-2 minutes. Add Part C to Part A+B and continue stirring with medium speed until uniform. Avoid air entrapment. Add Part D and mix until uniform. This formula can easily be converted to a hand scrub by the incorporation of 1% pumice.

Vanderbilt Minerals, LLC has performed a basic study that demonstrates that Triclosan solubilized in cocoyl sarcosine retains microbial inhibition of *Pseudomonas aeruginosa* and *Staphylococcus aureus*, sub. *aureus*. To make a claim that a personal care product is “antibacterial” requires the submission of supporting data to the U.S. EPA or FDA. Vanderbilt Minerals, LLC makes no representation that the use of Triclosan in these formulas will fulfill regulatory requirements.

RAW MATERIAL SUPPLIERS
[1]Ciba Specialty Chemicals Corp., Tarrytown, NY

TRADEMARKS
VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Irgasan is a registered trademark of Ciba Specialty Chemicals Corporation.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Body Wash Spray No. 500

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.0
	Water	58.5
B	Disodium Laureth Sulfosuccinate (Stepan Mild-SL3[1])	13.0
	Cocamidopropyl Hydroxysultaine (Mirataine® CBS[2])	5.0
	Polysorbate 20 (Tween® 20[3])	1.5
	Cocaimdopropyl Betaine (Amphosol® CA[1])	3.0
	Sodium Laureth Sulfate (Steol® CS-230[1])	14.0
	Jojoba Esters (Floresters™-15[4])	3.0
C	Preservative, Fragrance	q.s.

Procedure: Slowly add the **VEEGUM® *Ultra*** to the water while mixing at maximum available shear. Mix until fully hydrated. At reduced mixing speed, very slowly add the Part B ingredients in the order shown, mixing after each addition until uniform. Add the Part C ingredients and adjust as necessary to pH 5.5 ± 0.5.

RAW MATERIAL SUPPLIERS

[1]Stepan Company, Northfield, IL
[2]Solvay Novecare, Bruxelles, Belgium
[3]Croda, Inc., Edison, NJ
[4]Floratech Americas, Chandler, AZ

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Amphosol and Steol are registered trademarks of Stepan Company.
Floresters is a trademark of International Flora Technologies, Ltd.
Mirataine is a registered trademark of Rhodia Operations.
Tween is a registered trademark of Croda Americas LLC

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Pearlescent Conditioning Body Wash No. 488

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.00
	Water	61.25
B	Mica (and) Titanium Dioxide (Timiron® MP-1001[1])	0.50
C	Sodium Laureth Sulfate (Steol® CS-230[2])	25.00
	Lauramide DEA (Incromide™ 716[3])	7.50
	Cocoyl Sarcosine	3.75
D	Preservative, Fragrance	q.s.

Procedure: Slowly add the **VEEGUM® *Ultra*** to the water while mixing at maximum available shear. Mix until fully hydrated. Add Part B and mix until uniform. At reduced mixing speed, add the Part C ingredients in the order shown, mixing after each addition until uniform. Adjust as necessary to pH 5.0 ± 0.5.

RAW MATERIAL SUPPLIERS
[1]EMD Chemicals, Inc./RONA, Gibbstown, NJ
[2]Stepan Company, Northfield, IL
[3]Croda, Inc., Edison, NJ

TRADEMARKS
VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Incromide is a trademark of Croda, Inc.
Steol is a registered trademark of Stepan Company.
Timiron is a registered trademark of EM Industries, Incorporated.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Washing Cream for Sensitive Skin No. 505

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.0
	Water	63.0
B	Sodium Cocoyl Isethionate (Pureact™ I-78[1])	25.0
	Cocamidopropyl Hydroxysultaine (Mirataine® CBS[2])	10.0
C	Preservative	q.s.

Procedure: While heating the water to 60-65°C, slowly add the **VEEGUM® *Ultra*** while agitating at maximum available shear. Continue mixing until fully hydrated. Maintaining temperature, slowly add Part B ingredients in the order shown, mixing after each addition until smooth and uniform. Cool with mixing to < 45°C and then add Part C. Adjust as necessary to pH 5.5 ± 0.5.

RAW MATERIAL SUPPLIERS

[1]Innospec Active Chemicals, Edison, NJ
[2]Solvay Novecare, Bruxelles, Belgium

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Mirataine is a registered trademark of Rhodia Operations.
Pureact is a trademark of Innospec Performance Chemicals Company.

Rev01/31/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Conditioning Hair & Body Shampoo No. 499

		Wt.%
A	**VEEGUM®** ***Ultra*** or **VEEGUM EZ** Magnesium Aluminum Silicate	2.0
	Water	60.0
B	Sodium Laureth Sulfate (Steol® CS-230[1])	25.0
	Cocamidopropyl Betaine (Amphosol® CA[1])	9.0
	Lauramide DEA (Incromide™ 716[2])	3.0
	Citric Acid, 20%	1.0
C	Preservative, Fragrance	q.s.

Procedure: Slowly add the **VEEGUM®** ***Ultra*** or **VEEGUM EZ** to the water while mixing at maximum available shear. Mix until fully hydrated. At reduced mixing speed, very slowly add the Part B ingredients in the order shown, mixing after each addition until uniform. Add the Part C ingredients and adjust as necessary to pH 5.5 ± 0.5. This formula can easily be converted to a body scrub.

RAW MATERIAL SUPPLIERS

[1]Stepan Chemical Co., Northfield, IL
[2]Croda Inc, Edison, NJ

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Amphosol and Steol are registered trademarks of Stepan Company.
Incromide is a trademark of Croda, Inc.

Rev01/25/2021

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Aerosol Shave Cream for Sensitive Skin No. 503

		Wt.%
A	**VEEGUM®** ***Ultra*** Magnesium Aluminum Silicate	1.5
	VANZAN® NF Xanthan Gum	0.3
	Water	67.2
B	Glycerin	3.0
	Butylene Glycol	3.0
C	Stearic Acid XXX	3.0
	Coconut Acid	3.0
	Safflower Oil	0.2
	Soybean Oil	0.2
	Cetyl Alcohol	1.0
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350cs[1])	1.0
	Lanolin Alcohol	0.1
	Isosorbide Laurate	1.0
	Mineral Oil	3.0
D	Sodium Cocoyl Sarcosinate, 30%	10.0
	Panthenol	0.5
	Aloe Vera	0.5
E	Triethanolamine	1.5
	Preservative, Fragrance	q.s.

Procedure: While heating the water to 75°C, slowly add the **VEEGUM®** ***Ultra*** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining water phase ingredients from Part B, mixing until uniform. Maintain the water phase at 75°C. Blend the Part C oil phase ingredients and heat to 75°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing. Add the Part D ingredients when the emulsion is <40°C. Add the Part E ingredients when the emulsion is <35°C. Adjust as necessary to pH 7.5 ± 0.5.

RAW MATERIAL SUPPLIERS

[1]Dow Corning Corporation, Midland, MI

TRADEMARKS

VEEGUM and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC.
Xiameter is a registered trademark of Dow Corning Corporation.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Shaving Cream No. 501

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.0
	VANZAN® NF Xanthan Gum	0.5
	Water	74.5
B	Cetyl Alcohol	0.5
	Glyceryl Monostearate SE	3.0
	Caprylic/Capric Triglyceride (Neobee® M-5[1])	2.0
	C12-15 Alkyl Benzoate (Finsolv® TN[2])	3.0
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350cs[3])	3.0
	Lanolin Alcohol	1.0
	Isosorbide Laurate	0.5
	Mineral Oil	5.0
C	Sodium Lauroyl Sarcosinate, 30%	5.0
D	Triethanolamine or Citric Acid (to pH 5.75 ± 0.25)	q.s.
	Preservative, Fragrance	q.s.

Procedure: While heating the water to 75°C, slowly add the **VEEGUM® *Ultra*** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Maintain the water phase at 75°C. Blend the Part B oil phase ingredients and heat to 75°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing. Add the Part C surfactant when the emulsion is <55°C. Add the Part D ingredients when the emulsion is <35°C. Adjust as necessary to pH 5.75 ± 0.25.

RAW MATERIAL SUPPLIERS

[1]Stepan Company, Northfield, IL
[2]Innospec Active Chemicals, Edison, NJ
[3]Dow Corning Corporation, Midland, MI

TRADEMARKS

VEEGUM and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC.
Finsolv is a registered trademark of Innospec Performance Chemicals Company.
Neobee is a registered trademark of Stepan Company.
Xiameter is a registered trademark of Dow Corning Corporation.

Rev07/01/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Waterless Skin Scrub with D-Limonene No. 479

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	2.0
	VANZAN® NF Xanthan Gum	0.6
	Water	51.7
B	Oleic Acid	10.0
	Mineral Oil	10.0
	Cetyl Alcohol	1.0
	Isosorbide Laurate	1.0
	Lanolin	1.0
C	Water	2.0
	Potassium Hydroxide	0.7
D	D-Limonene	10.0
E	Polyethylene Beads (A-C 9-A[1])	10.0
F	Preservative, Fragrance	q.s.

Procedure: While heating the water to 75°C, slowly add the **VEEGUM® *Ultra*** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Maintain the water phase at 75°C. Blend the Part B oil phase ingredients and heat to 75°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing. Add the Part C solution of potassium hydroxide in water when the emulsion is 45°C. Continue to cool while mixing and add Parts D, E and F when the emulsion is <35°C.

RAW MATERIAL SUPPLIERS
[1]Honeywell Specialty Wax & Additives, Morristown, NJ

TRADEMARKS
VEEGUM and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC.

Rev04/25/2013

Vanderbilt Minerals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.
33 WINFIELD STREET, P.O. BOX 5150, NORWALK, CONNECTICUT 06856-5150 • (800) 562-2476
Fax (203) 855-1220 • Internet Address: www.vanderbiltminerals.com

Waterless Hand Cleaner with Abrasive No. 477

		Wt.%
A	**VEEGUM® *Ultra*** Magnesium Aluminum Silicate	1.5
	VANZAN® NF Xanthan Gum	0.5
	Water	42.3
B	Oleic Acid	9.0
	Mineral Oil	9.0
C	Water	2.0
	Potassium Hydroxide	0.7
D	C11-12 Isoparaffin (Isopar® K[1])	25.0
E	Polyethylene Beads (A-C 9-A[2])	10.0
F	Preservative, Fragrance	q.s.

Procedure: While heating the water to 75°C, slowly add the **VEEGUM® *Ultra*** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Maintain the water phase at 75°C. Blend the Part B oil phase ingredients and heat to 75°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing. Add the Part C solution of potassium hydroxide in water when the emulsion is 45°C. Continue to cool while mixing and add Parts D, E and F when the emulsion is <35°C.

RAW MATERIAL SUPPLIERS
[1]ExxonMobil Chemical, Houston, TX
[2]Honeywell Specialty Wax & Additives, Morristown, NJ

TRADEMARKS
VEEGUM and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC.
Isopar is a registered trademark of Exxon Mobil Corporation.

Rev04/25/2013

NOTES

NOTES

Vanderbilt Minerals, LLC

A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.

33 WINFIELD STREET
NORWALK, CT 06856
800.562.2476
MINERALSALES@VANDERBILTMINERALS.COM
WWW.VANDERBILTMINERALS.COM

RESPONSIBLE CARE®
OUR COMMITMENT TO SUSTAINABILITY

UL REGISTERED FIRM
DQS Inc.
VANDERBILT MINERALS, LLC
CERTIFIED TO ISO 9001:2015
10012164