



Specialties Department

OVER-THE-COUNTER (OTC) & PERSONAL CARE FORMULARY
VANATURAL® Bentonite Clay VEEGUM® Magnesium Aluminum Silicate VANZAN® Xanthan Gum

VANATURAL Bentonite Clay (INCI Name: Bentonite) and **VEEGUM** Magnesium Aluminum Silicate (INCI Name: Magnesium Aluminum Silicate) are natural water-washed smectite clays that reliably stabilize personal care and pharmaceutical emulsions and suspensions.

VANZAN (INCI Name: Xanthan Gum) is a natural, high molecular weight, exocellular polysaccharide derived from *Xanthomonas campestris*. Because of its protective function in nature, it is more resistant than most gums to shear, heat, bacterial, enzyme, and UV degradation. **VANZAN** products are efficient thickeners as well as emulsion and suspension stabilizers. They also provide useful synergism with **VANATURAL** and **VEEGUM** clays.

USING VANATURAL AND VEEGUM CLAYS

VANATURAL and **VEEGUM** products must be properly dispersed in water to provide their best performance. No other materials should be present in the water, because they can interfere with proper clay hydration and colloidal structure formation. 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. One grade, **VEEGUM Ultra**, is relatively unaffected by changes in these mixing factors; adequate hydration can be achieved quickly, using room temperature water and a simple, slow-speed propeller mixer.

The following table provides guidelines for the minimum amounts of time suggested for the hydration of **VANATURAL** and **VEEGUM** products. Actual hydration times, in the laboratory or in production, will depend on the particular combination of batch size, mixer shear, and water temperature used. Whichever mixing conditions are used, it is very important that they be carefully controlled to achieve reproducible results in the final formulation.

Water Temp.	Mixer Type	Mixer Speed rpm	Minimum Suggested Mixing Time		
			VEEGUM R VEEGUM K	VANATURAL VEEGUM HS	VEEGUM Ultra
25°C	Propeller	800	120 min.	30 min.	15 min.
75°C	Propeller	800	45 min.	20 min.	10 min.
25°C	Homogenizer	3000	30 min.	20 min.	10 min.
75°C	Homogenizer	3000	15 min.	10 min.	10 min.

USING VANZAN XANTHAN GUM

VANZAN products are soluble in both cold and warm water. To dissolve quickly and completely, they must first be properly dispersed so that individual gum particles are surrounded by the aqueous medium. The individual particles then hydrate and dissolve. Good dispersion is promoted by high shear mixing, blending the gum particles into a water-miscible non-solvent such as a glycol or alcohol before addition to the aqueous phase, dry blending with other formula ingredients, such as co-thickeners, salts, acids, abrasives or pigments before addition to the aqueous phase.

RECOMMENDED GRADES FOR SKIN AND HAIR CARE
Smectite Clays:

- VANATURAL** Rapidly hydrating high purity bentonite clay for most personal care applications.
- VEEGUM Ultra** A unique acidic smectite clay that is especially easy to hydrate.
- VEEGUM R** The standard grade for a wide range of applications; Magnesium Aluminum Silicate NF Type IA
- VEEGUM HV** The highest viscosity pharmaceutical grade; Magnesium Aluminum Silicate NF Type IC
- VEEGUM K** A low acid demand, high electrolyte stability grade; Magnesium Aluminum Silicate NF Type IIA
- VEEGUM HS** The highest stability to electrolytes and pH extremes; Purified Bentonite NF

Xanthan Gum:

- VANZAN NF** The standard grade for most personal care and pharmaceutical applications; Xanthan Gum NF
- VANZAN NF-C** Produces clear solutions; used when product clarity is essential; Xanthan Gum NF

rev 4/16/2019

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Bismuth Subsalicylate Suspension No. 596

		Wt.%
A	VEEGUM® HS Magnesium Aluminum Silicate	1.6
	VANZAN® NF Xanthan Gum	0.4
	Water	94.2
B	Sodium Salicylate	0.1
	Sorbic Acid	0.1
	Sodium Saccharin	0.2
	Bismuth Subsalicylate SG ¹	3.4

Procedure: Slowly add the **VEEGUM® HS** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add Part B ingredients in order, mixing after each addition until uniform. Mix suspension slowly as necessary to de-aerate before packaging.

RAW MATERIAL SUPPLIERS

¹MCP Metalspecialties, Fairfield, CT/MCP HEK Gmbh, Lubeck, Germany

TRADEMARKS

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Rev01/30/2013

Antacid Formulation No. 445

		Wt.%
A	VEEGUM® HS Magnesium Aluminum Silicate	0.25
	VANZAN® NF Xanthan Gum	0.28
	Water	61.69
B	Methylparaben	0.10
	Propylparaben	0.05
C	Sorbitol, 70%	14.30
D	Barcroft™ Aluminum Hydroxide GEL LV 13 USP ¹ , 20% Al(OH) ₃	11.33
	Barcroft™ Magnesium Hydroxide Paste USP ¹ , 30% Mg(OH) ₂	12.00

Procedure: Slowly add the **VEEGUM® HS** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add Parts B, C and D in order, mixing after each addition until uniform.

RAW MATERIAL SUPPLIERS¹SPI Pharma Group, New Castle, DE**TRADEMARKS**

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Barcroft is a trademark of SPI Pharma Group

Rev01/30/2013

Antacid Formulation No. 570

		Wt. %
A	VEEGUM® HV Magnesium Aluminum Silicate	1.25
	Water	60.97
B	Methylparaben	0.10
	Propylparaben	0.05
C	Sorbitol, 70%	14.30
D	Barcroft™ Aluminum Hydroxide GEL LV 13 USP ¹ , 20% Al(OH) ₃	11.33
	Barcroft™ Magnesium Hydroxide Paste USP ¹ , 30% Mg(OH) ₂	12.00

Procedure: Slowly add the **VEEGUM® HV** to the water agitated at maximum available shear. Mix until fully hydrated. Add Parts B, C and D in order, mixing after each addition until uniform.

RAW MATERIAL SUPPLIERS¹SPI Pharma Group, New Castle, DE**TRADEMARKS****VEEGUM** is a registered trademark of Vanderbilt Minerals, LLC.
Barcroft is a trademark of SPI Pharma Group

Rev01/30/2013

Hydrocortisone Acetate Cream No. 366

	Wt.%
A VEEGUM® K Magnesium Aluminum Silicate	1.50
Water	66.49
Citric Acid	0.01
Polysorbate 80 (Tween® 80 ¹)	0.50
Hydrocortisone Acetate	0.50
B C12-15 Alkyl Benzoate (Finsolv® TN ²)	10.00
Hydrogenated Polyisobutylene (Parleam® ³)	5.00
C18-C36 Acid (Syncrowax™ AW1-C ⁴)	4.00
Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165 ¹)	12.00
C Preservative	q.s.

Procedure: While heating the water to 75-80°C, slowly add the **VEEGUM® K** to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining Part A ingredients and mix until uniform. Maintain the water phase at 75-80°C. Blend the Part B oil phase ingredients and heat to 75-80°C. Add Part B to Part A with good agitation. Cool with mixing; add the preservative when the emulsion is <40°C.

RAW MATERIAL SUPPLIERS
¹Uniqema, New Castle, DE

²Innospec Active Chemicals, Edison, NJ

³Rossow USA, Highlands, NJ

⁴Croda, Inc., Edison, NJ

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VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.

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Finsolv is a registered trademark of Innospec Performance Chemicals Company.

Parleam is a registered trademark of Etablissements B. Rossow et Cie.

Syncrowax is a trademark of Croda, Inc.

Rev01/30/2013

Benzocaine Cream No. 360

	Wt.%
A VEEGUM® R Magnesium Aluminum Silicate	1.5
Water	56.8
Propylene Glycl	3.0
10% Silicone Emulsion (FG-10 Antifoam Emulsion ¹)	0.2
Mineral Oil, Light	10.0
Acetylated Lanolin Alcohol (Acetulan ²)	7.0
Menthol, USP	1.0
B Benzocaine, USP	5.0
Polysorbate 60 (Tween® 60 ³)	0.5
C18-C36 Acid (Syncrowax™ AW1-C ⁴)	3.0
Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165 ³)	12.0
C Preservative	q.s.

Procedure: While heating the water to 75-80°C, Slowly add the **VEEGUM® R** to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining Part A ingredients and mix until uniform. Maintain the water phase at 75-80°C. Blend the Part B oil phase ingredients and heat to 75-80°C, keeping the benzocaine suspended. Add Part B to Part A with good agitation. Cool with mixing; add the preservative when the emulsion is <40°C.

RAW MATERIAL SUPPLIERS
¹Dow Corning Corporation, Midland, MI

²Lubrizol Advanced Materials, Inc., Cleveland, OH

³Uniqema, New Castle, DE

⁴Croda, Inc., Edison, NJ

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VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.

Acetulan is a registered trademark of The Lubrizol Corporation.

Arlacel and Tween are registered trademarks of Uniqema Americas LLC.

Syncrowax is a trademark of Croda, Inc.

Rev01/30/2013

Instant Sulfur Acne Treatment Mask No. 590

	Wt.%
VEEGUM® HS Magnesium Aluminum Silicate	5
Kaolin USP	60
Sodium Bicarbonate	25
Avena Sativa (Oat) Kernel Flour (Tech-O® #11-070 Oat Flour ¹)	5
Precipitated Sulfur USP	5

Procedure: Dry blend all ingredients.

Use: By volume, mix about 1 part water or witch hazel into 4.5 parts mask powder and mix to form a smooth paste.

RAW MATERIAL SUPPLIERS

¹Beacon CMP Corporation, Kenilworth, NJ

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VEEGUM is a registered trademarks of Vanderbilt Minerals, LLC.
Tech-O is a registered trademark of Beacon CMP Corporation.

Rev01/21/2013

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) 2.0
	Water (and) Mulberry Root Extract (and) Scultellaria Baicalensis Extract (and) Na2 EDTA (Biowhite ^{®6})
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
¹Lubrizol Advanced Materials Inc., Cleveland, OH

²Croda, Inc., Edison, NJ

³Stepan Company, Northfield, IL

⁴Innospec Active Chemicals, Edison, NJ

⁵Dow Corning Corporation, Midland, MI

⁶BASF 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

5% Benzoyl Peroxide Acne Treatment Lotion No. 356

	Wt.%
A	VEEGUM® R Magnesium Aluminum Silicate 0.90
	VANZAN® NF Xanthan Gum 0.40
	Water 75.55
B	Propylene Glycol 6.00
	Benzoyl Peroxide, 70% Powder 7.15
C	Laureth-4 (Brij® L4 ¹) 5.00
	Acetylated Lanolin Alcohol (Acetulan® ²) 5.00
D	Preservative q.s.

Procedure: Slowly add the **VEEGUM® R** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Mill Part B to a smooth paste. Blend Part B with Part C. Add this blend to Part A and mix until uniform.

RAW MATERIAL SUPPLIERS¹Uniqema, New Castle, DE²Lubrizol Advanced Materials, Inc., Cleveland, OH**TRADEMARKS****VANZAN** and **VEEGUM** are registered trademarks of Vanderbilt Minerals, LLC.

Brij is a registered trademark of Uniqema Americas LLC.

Acetulan is a registered trademark of The Lubrizol Corporation.

Rev01/30/2013

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
¹Stepan Company, Northfield, IL

²Innospec Active Chemicals, Edison, NJ

³Dow Corning Corporation, Midland, MI

⁴Croda Inc., Edison, NJ

⁵RITA Corporation, Crystal Lake, IL

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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.

Antifungal Cream No. 355

	Wt.%
A VEEGUM® R Magnesium Aluminum Silicate	0.75
Water	48.75
Water	75.40
Sorbitol, 70% Solution	10.00
Polysorbate 80 (Tween® 80 ¹)	1.00
Zinc Undecylenate	20.00
B Caprylic Acid	5.00
C12-15 Alkyl Benzoate (Finsolv® TN ²)	3.00
Polysorbate 80 (Tween® 80 ¹)	1.50
C18-C36 Acid (Syncrowax™ AW1-C ³)	2.00
Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165 ¹)	8.00
C Preservative	q.s.

Procedure: While heating the water to 70-75°C, slowly add the **VEEGUM® R** to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining Part A ingredients and mix until uniform. Maintain the water phase at 70-75°C. Blend the Part B oil phase ingredients and heat to 70-75°C. Add Part B to Part A with good agitation. Cool with mixing; add the preservative when the emulsion is <40°C.

RAW MATERIAL SUPPLIERS
¹Uniqema, New Castle, DE

²Innospec Active Chemicals, Edison, NJ

³Croda, Inc., Edison, NJ

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Syncrowax is a trademark of Croda, Inc.

Rev01/30/2013

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
¹Lubrizol Advanced Materials, Inc., Cleveland, OH

²Croda, Inc., Edison, NJ

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Carbopol is a registered trademark of Lubrizol Advanced Materials, Inc.

Rev04/25/2013

Calamine Lotion No. 361

		Wt. %
A	VEEGUM® R Magnesium Aluminum Silicate	0.8
	VANZAN® NF Xanthan Gum	0.2
	Water	79.6
B	Propylene Glycol	3.0
	Polysorbate 80	0.4
C	Calamine (Prepared), USP	8.0
	Zinc Oxide, USP	8.0
D	Preservative	q.s.

Procedure: Slowly add the **VEEGUM® R** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add Part B and mix slowly until uniform. Add Part C slowly and mix until uniform. Add Part D slowly and mix until uniform.

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Rev01/30/2013

Zinc Pyrithione Lotion Shampoo No. 364

	Wt.%
A VEEGUM® R Magnesium Aluminum Silicate	0.5
Water	51.1
Hydroxypropyl Guar (Jaguar HP-60 ¹)	0.5
B Ammonium Lauryl Sulfate (Rhodapon™ L-22 ¹)	40.0
PPG-5-Ceteth-10 Phosphate (Crodafos™ SG ²)	1.8
Lauramide DEA (Monamid® 716 ²)	4.0
C Zinc Pyrithione, 48% (Zinc Omadine® ³)	2.1
Preservative	q.s.

Procedure: Slowly add the **VEEGUM® R** to the water agitated at maximum available shear. Mix until fully hydrated. Add the hydroxypropyl guar and mix until uniformly dispersed. With slow stirring add the Part B ingredients in order. Add the phosphate slowly, mixing until the guar gum is totally dissolved. Add the Part C ingredients in order listed, agitating slowly. Mix until smooth and uniform. Avoid incorporation of air. Adjust as necessary to pH 7.2.

RAW MATERIAL SUPPLIERS
¹Solvay Novecare, Bruxelles, Belgium

²Croda Inc., Edison, NJ

³Arch Personal Care Products L.P.,
South Plainfield, NJ

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Monamid is a registered trademark of Mona Industries, Inc.

Omadine is a registered trademark of Arch Chemicals, Inc.

Rhodapon is a trademark of Rhodia, Inc.

Rev07/01/2013

External Analgesic Cream No. 369

	Wt.%
A VEEGUM® R Magnesium Aluminum Silicate	1.5
Water	54.7
FG-10 Antifoam ¹	0.2
Propylene Glycol	3.0
Methyl Salicylate	15.0
Menthol	5.0
B Polysorbate 80 (Tween® 80 ²)	0.6
C18-C36 Acid (Syncrowax™ AW1-C ³)	5.0
Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165 ²)	15.0
C Preservative	q.s.

Procedure: While heating the water to 75-80°C, slowly add the **VEEGUM R** to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining Part A ingredients and mix until uniform. Maintain the water phase at 75-80°C. Blend the Part B oil phase ingredients and heat to 75-80°C. Add Part B to Part A with good agitation. Cool with mixing; add the preservative when the emulsion is <40°C.

RAW MATERIAL SUPPLIERS
¹Dow Corning Corporation, Midland, MI

²Uniqema, New Castle, DE

³Croda, Inc., Edison, NJ

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Syncrowax is a trademark of Croda, Inc.

Rev01/30/2013

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.

TRADEMARKS

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Rev06/03/2016

Extra-Strength Roll-On Antiperspirant No. 443

	Wt.%
A VEEGUM® HV Magnesium Aluminum Silicate	1.0
Water	29.0
B Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165 ¹)	8.0
C Aluminum Zirconium Tetrachlorohydrate GLY, 30% Solution	33.0
Aluminum Chloride, 32° Baume Solution	5.5
Aluminum Chlorhydrate, 50% Solution	16.5
D Cyclomethicone (Dow Corning® ST-Cyclomethicone-5 NF ²)	7.0
E Preservative	q.s.

Procedure: While heating the water to 75°C, slowly add the **VEEGUM® HV** to the water agitated at maximum available shear. Mix until fully hydrated. Heat Part B to 75°C. Heat Part C to 50-55°C. Add Part B to Part A with good agitation. Cool with mixing to 50°C and add Part C. Cool with mixing to 25°C and add Part D with good agitation. Add Part E and mix until uniform.

RAW MATERIAL SUPPLIERS
¹Uniqema, New Castle, DE

²Dow Corning Corporation, Midland, MI

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VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.

Arlacel is a registered trademark of Uniqema Americas LLC.

Dow Corning is a registered trademark of Dow Corning Corporation.

Rev01/30/2013

Soft-Gel Toothpaste No. 562

		Wt. %
A	VEEGUM[®] D Magnesium Aluminum Silicate	1.00
	Water	39.71
	Tetrasodium Pyrophosphate (Food Grade)	1.00
	VANZAN[®] NF Xanthan Gum	0.50
B	Methyl Paraben NF	0.20
	Propyl Paraben NF	0.05
	Sorbitol, 70%	10.00
	Glycerin, 99.7% USP	10.00
	Hydrated Silica (Zeodent [®] 113 ¹)	30.00
	Saccharin	0.20
C	Water	5.60
	Sodium Fluoride	0.24
D	Sodium Lauryl Sulfate, 29% (Rhodapon [™] LSB ²)	1.50
	FD & C Blue 1	q.s.

Procedure: Sift the **VEEGUM[®] D** into an established vortex in the water and mix until dispersed. Add the TSPP and mix until dissolved. Sift in the **VANZAN[®] NF** and mix at maximum available shear until the **VEEGUM[®] D** is fully hydrated and the **VANZAN[®] NF** is dissolved. Add the Part B ingredients in the order shown, mixing thoroughly after each addition. In Part C, dissolve the sodium fluoride in the water and then add to the batch. Add the sodium lauryl sulfate with very slow mixing to avoid air entrapment. Add the colorant and mix thoroughly.

RAW MATERIAL SUPPLIERS
¹J.M Huber Corporation, Havre de Grace, MD

²Rhodia, Inc., Cranbury, NJ

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

Zeodent is a registered trademark of J.M. Huber Corporation.

Rhodapon is a trademark of Rhodia, Inc.

Rev01/30/2013

Stay Dry W/O Antiperspirant Stick No. 341

	Wt.%
A VEEGUM[®] HV Magnesium Aluminum Silicate	1.0
Water	20.0
Aluminum Chlorhydrate, impalpable	18.0
B Cyclomethicone (Dow Corning [®] ST-Cyclomethicone-5 NF ¹)	26.0
Isopropyl Myristate	5.0
Stearyl Alcohol	24.0
Sorbitan Trioleate (Span [®] 85 ²)	5.0
Polysorbate 85 (Tween [®] 85 ²)	1.0
C Preservative	q.s.

Procedure: While heating the water to 65-70°C, slowly add the **VEEGUM HV** to the water agitated at maximum available shear. Mix until fully hydrated. Add the aluminum chlorhydrate and mix until uniform, maintaining to 65-70°C. Heat Part B to 65-70°C. Add Part A to Part B with good agitation. Cool with mixing to 50-55°C. Add Part C and pour into molds to cool.

RAW MATERIAL SUPPLIERS
¹Dow Corning Corporation, Midland, MI

²Uniqema, New Castle, DE

TRADEMARKS
VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.

Dow Corning is a registered trademark of Dow Corning Corporation.

Span and Tween are registered trademarks of Uniqema Americas LLC.

Rev01/30/2013

Roll-on Antiperspirant No. 629

		Wt. %
A	VEEGUM® HS Magnesium Aluminum Silicate	3.0
	Water	36.5
B	Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165-PW-(AP) ¹)	8.0
C	Aluminum/Zirconium Tetrachlorohydrate-GLY, USP 35% solution (Achieve® L 5435 ²)	52.5
D	Preservative	q.s.

Procedure: While heating the water to 75°C, slowly add the **VEEGUM® HS** while mixing at maximum available shear. Mix until fully hydrated. Heat Part B to 75°C. Add Part B to Part A with good agitation on the homogenizer. Cool with mixing to 50°C. Heat Part C to 50-55°C and then add Part C to the emulsion. Avoid air entrapment. Continue to cool with mixing to ~30°C and add Part D with good agitation.

RAW MATERIAL SUPPLIERS¹Croda, Inc., Edison, New Jersey²Gulbrandsen Technologies, Clinton, New Jersey**TRADEMARKS****VEEGUM** is a registered trademark of Vanderbilt Minerals, LLC.

Achieve is a registered trademark of Gulbrandsen Technologies, Inc.

Arlacel is a registered trademark of Uniqema Americas LLC.

Rev06/14/2016

Sulfur and Salicylic Acid Acne Treatment Wash No. 583

		Wt. %
A	VEEGUM[®] HS Magnesium Aluminum Silicate	2.0
	VANZAN[®] NF Xanthan Gum	0.50
	Water	76.75
B	Sucrose Stearate (Surfhope [®] SE Cosme C-1811 ¹)	1.25
	Cetyl Alcohol	1.0
C	Glycerin	4.0
	Sulfur (Yellow Jacket [®] Wettable Sulfur II ²)	2.0
	Sodium Laureth Sulfate	10.0
	Salicylic Acid, USP	2.0
D	Preservative	q.s.
	Sodium Hydroxide, 50%	q.s.

Procedure: While heating the water to 65°C, slowly add the **VEEGUM[®] HS** and **VANZAN[®] NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Maintaining temperature at 65°C, add Part B ingredients in order, mixing after each addition until uniform. Cool with stirring to ambient temperature. Slowly add the part C and Part D ingredients in the order listed, mixing after each addition until uniform. Avoid the incorporation of air. Adjust to approximately pH 4.5 with sodium hydroxide solution.

RAW MATERIAL SUPPLIERS

¹Arch Personal Care Products L.P., South Plainfield, NJ

²Georgia Gulf Sulfur Corp., Valdosta, GA

TRADEMARKS

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

Surfhope is a registered trademark of Mitsubishi Chemical Corporation.

Yellow Jacket is a registered trademark of Georgia Gulf Sulfur Corporation.

Rev01/30/2013

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 SUPPLIERS¹Innospec Active Chemicals, Edison, NJ²Solvay Novecare, Bruxelles, Belgium**TRADEMARKS****VEEGUM** is a registered trademark of Vanderbilt Minerals, LLC.

Mirataine is a registered trademark of Rhone-Poulenc, Inc.

Pureact is a trademark of Innospec Performance Chemicals Company.

Rev01/31/2013

Bisabolol Cleansing Gel No. 557

	Wt. %
A VANZAN® NF-C Xanthan Gum	1.00
Water	80.74
Disodium EDTA	0.05
B Bisabolol (Alpha-Bisabolol Natural ¹)	0.20
Ethanol, 96%	15.00
Panthenol (and) Propylene Glycol (D-Panthenol 50P ¹)	1.00
PEG-40 Hydrogenated Castor Oil (Cremophor® CO 40 ¹)	2.00
C Preservative	q.s.

Procedure: Slowly add the **VANZAN® NF-C** to the water agitated at maximum available shear. Mix until fully dissolved. Add the disodium EDTA and mix until dissolved. Combine and mix the Part B ingredients until clear. Add Part B to Part A and mix until uniform. Add Part C and mix until uniform. Adjust as necessary to pH 6.5 ± 0.5.

RAW MATERIAL SUPPLIERS
¹BASF Corporation, Florham Park, NJ

TRADEMARKS
VANZAN is a registered trademark of Vanderbilt Minerals, LLC.

Cremophor is a registered trademark of BASF Aktiengesellschaft Corporation.

Rev01/30/2013

Washing Gel with Tea Tree Oil No. 556

		Wt. %
A	VANZAN® NF-C Xanthan Gum	1.00
	Water	72.32
	Disodium EDTA	0.05
B	Cocamidopropyl Betaine (Amphosol® CA ¹)	10.00
	Decyl Glucoside (Plantaren® 2000 N ²)	6.60
	Water (and) Melaleuca Oil (and) Ethoxylated Castor Oil (and) Polysorbate 20 (Water-Soluble Tea Tree Oil ³)	10.00
	C Preservative	q.s.

Procedure: Slowly add the **VANZAN® NF-C** to the water agitated at maximum available shear. Mix until fully dissolved. Add the disodium EDTA and mix until dissolved. Add the Part B ingredients in the order listed, mixing after each addition until uniform. Add Part C and mix until uniform. Adjust as necessary to pH 6.5 ± 0.5.

RAW MATERIAL SUPPLIERS
¹Stepan Company, Northfield, IL

²Cognis Corporation, Ambler, PA

³Southern Cross Botanicals PTY Ltd, Lennox Head, NSW, Australia

TRADEMARKS
VANZAN is a registered trademark of Vanderbilt Minerals, LLC.

Amphosol is a registered trademark of Stepan Company.

Plantaren is a registered trademark of Cognis GmbH.

Rev07/01/2013

Extra Mild Facial Cleanser No. 553

		Wt. %
A	VANZAN® NF-C Xanthan Gum	1.0
	Water	76.2
B	C12-15 Alky Benzoate (Finsolv® TN ¹)	5.0
	PEG-14 Dimethicone (Dow Corning® 193 ²)	1.2
C	Cocamidopropyl Betaine (Amphosol® CA ³)	10.0
	Decyl Glucoside (Plantaren® 2000N ⁴)	6.6
D	Preservative	q.s.

Procedure: Sift the **VANZAN® NF-C** into the water agitated at maximum available shear. Mix until completely dissolved. Blend Part B ingredients, then add to Part A and mix thoroughly. Add Part C ingredients separately and mix thoroughly after each addition. Avoid air entrapment. Add the preservative and mix until uniform.

RAW MATERIAL SUPPLIERS
¹Innospec Active Chemicals, Edison, NJ

²Dow Corning Corporation, Midland, MI

³Stepan Chemical Co., Northfield, IL

⁴Cognis Corporation, Ambler, PA

TRADEMARKS
VANZAN is a registered trademark of Vanderbilt Minerals, LLC.

Amphosol is a registered trademark of Stepan Company.

Dow Corning is a registered trademark of Dow Corning Corporation.

Finsolv is a registered trademark of Innospec Performance Chemicals Company.

Plantaren is a registered trademark of Cognis GmbH Corporation.

Rev07/01/2013

Natural Exfoliant Scrub No. 576

	Wt.%
A VANATURAL [®] Bentonite Clay	3.00
VANZAN [®] NF Xanthan Gum	0.75
Water	75.75
B Decyl Glucoside (Plantaren [®] 2000N ¹)	7.00
C Cocamidopropyl Betaine (Amphosol [®] CA ²)	3.00
Propylene Glycol (and) Water (and) <i>Mentha</i> Piperita (Peppermint) Leaf	2.00
Extract (and) <i>Mentha</i> Piperita (Peppermint) Oil (Aromaphyte of Peppermint ³)	1.50
Water (and) Melaleuca Oil (and) Ethoxylated Castor Oil (and) Polysorbate 20 (Water-Soluble Tea Tree Oil ⁴)	
D Zea Mays (Corn) Cob Powder (Processed Corn Cob (60/100)) ⁵	5.00
E Cocamide DEA (Ninol [®] 40-CO ²)	2.00
F Preservative	q.s.

Procedure: Slowly add the **VANATURAL**[®] and **VANZAN**[®] NF sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Slowly add Parts B, C, D, E and F in order, mixing after each until smooth while avoiding air entrapment and foaming.

RAW MATERIAL SUPPLIERS
¹Cognis Corporation, Ambler, PA

²Stepan Company, Northfield, IL

³Active Organics Inc., Lewisville, TX

⁴Southern Cross Botanicals PTY Ltd, Lennox Head, NSW, Australia

⁵Mt. Pulaski Products, Inc., Mt. Pulaski, IL

TRADEMARKS
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Amphosol and Ninol are registered trademarks of Stepan Company.

Plantaren is a registered trademark of Cognis GmbH.

Rev07/01/2013

Green Tea Instant Face Mask No. 626

	Wt. %
VEEGUM® CH Magnesium Aluminum Silicate	5
Kaolin Clay, Cosmetic Grade	67
Zinc Oxide or Calamine, USP	20
Polyvinylpyrrolidone (PVP K-30 ¹)	5
Allantoin	2
Camellia Sinensis Leaf Extract (Green Tea Extract ²)	1

Procedure: Mix powders until uniformly blended.

Use: Mix powder with sufficient water, witch hazel or honey to make a spreadable paste.

RAW MATERIAL SUPPLIERS

¹Ashland Specialty Ingredients, Wilmington, DE

²Greentech USA, Yarmouth, ME

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.

Rev06/13/2016

Exfoliating Facial Scrub Containing Tea Tree Oil No. 555

		Wt. %
A	Water	71.13
	VANZAN® NF-C Xanthan Gum	1.10
	Disodium EDTA	0.05
B	Cocamidopropyl Betaine (Amphosol® CA ¹)	10.00
	Decyl Glucoside (Plantaren® 2000N ²)	6.60
	Water (and) Melaleuca Oil (and) Ethoxylated Castor Oil (and) Polysorbate 20 (Water-Soluble Tea Tree Oil ³)	10.00
	Melaleuca Alternifolia Leaf Powder (Melafresh® Exfol 100 ³)	1.00
C	Preservative	q.s.
	Triethanolamine	0.12

Procedure: Sift the **VANZAN® NF-C** into the water agitated at maximum available shear. Mix until completely dissolved. Add Part B ingredients separately, mixing after each until uniform. Avoid air entrapment. Add the preservative and mix until uniform. Add triethanolamine to adjust pH to 6.5 ± 0.5.

RAW MATERIAL SUPPLIERS
¹Stepan Company, Northfield, IL

²BASF Care Creations, Florham Park, NJ

³Southern Cross Botanicals PTY Ltd., Lennox Head, NSW, Australia

TRADEMARKS
VANZAN is a registered trademark Vanderbilt Minerals, LLC.

Amphosol is a registered trademark of Stepan Company.

Melafresh is a registered trademark of Juldon Pty Ltd.

Plantaren is a registered trademark of Cognis GmbH.

Rev01/21/2013

Aloe & Oat Instant Mask No. 591

	Wt.%
VEEGUM® HS Magnesium Aluminum Silicate	5.00
Kaolin USP	88.95
Aloe Barbados Leaf Juice (and) Maltodextrin (Terra-Spray™ Spray Dried Aloe Vera Powder 100X ¹)	1.00
Avena Sativa (Oat) Kernel Flour (Tech-O® #11-070 Oat Flour ²)	5.00
Cyclohexanecarboxamide, N-ethyl-5-methyl-2-(1-methylethyl)- (ICE 3000 Cooling Sensate (WS-3) ³)	0.05

Procedure: Dry blend all ingredients.

Use: By volume, mix about 1 part water, witch hazel or cider vinegar into 4 parts of mask powder and mix to form a smooth paste.

RAW MATERIAL SUPPLIERS

¹Terry Laboratories, Melbourne, FL

²Beacon CMP Corporation, Kenilworth, NJ

³Qaroma, Baytown, TX

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.

Terra-Spray is a trademark of Terry Laboratories.

Tech-O is a registered trademark of Beacon CMP Corporation.

Rev01/21/2013

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
¹Symrise, Teterboro, NJ

²Croda, 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

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
¹Symrise, Teterboro, NJ

²BASF Care Creations, Florham Park, NJ

³Stepan 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

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
¹Lonza, Inc., Allendale, NJ

²Croda, Inc., Edison, NJ

³Stepan Company, Northfield, IL

⁴Abitec Corporation, Columbus, OH

⁵Innospec Active Chemicals, Edison, NJ

⁶Dow Corning Corporation, Midland, MI

⁷Emery Oleochemicals, LLC, Cincinnati, OH

⁸Takasago International Corp., Rockleigh, NJ

⁹Evonik Goldschmidt Chemical Corporation, Hopewell, VA

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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

Organic Skin Lotion No. 594

	Wt. %
A	VANATURAL [®] Bentonite Clay 2.5
	VANZAN [®] NF Xanthan Gum 0.5
	Water 56.0
B	Aloe Vera Gel, from Aloe Vera Whole Leaf Powder Organic Spray Dried 100X ¹ (1% powder/99% water) 20.0
C	Cetearyl Wheat Straw Glycosides (and) Cetearyl Alcohol (Xyliance ^{™2}) 5.0
	Butyrospermum Parkii (Shea) Butter (Shea Butter-Ultra Refined [™] Certified Organic ³) 3.5
	Theobroma Cacao (Cocoa) Seed Butter (Cocoa Butter-Ultra Natural [™] Certified Organic ³) 3.5
	Persea Gratissima (Avocado) Oil (Avocado Oil Certified Organic ³) 6.0
	Simmondsia Chinensis (Jojoba) Seed Oil (Jojoba Oil-Natural Golden-Certified Organic ³) 3.0
D	Preservative q.s.

Procedure: While heating the water to 75°C, slowly add the **VANATURAL**[®] and **VANZAN**[®] **NF** (sequentially or as a dry blend) while mixing at maximum available shear. Mix until fully hydrated. Prepare Part B by dissolving aloe vera powder in water then add slowly to Part A. Maintain the water phase temperature at 75°C. Combine Part C ingredients and heat to 75°C. Add Part C oil phase to Part A/B water phase and mix thoroughly. Cool with mixing; add Part D when the emulsion is <30°C.

RAW MATERIAL SUPPLIERS
¹Terry Laboratories, Inc., Melbourne, FL

²Actives International, Allendale, NJ

³BioChemica Int'l, Inc., Melbourne, FL

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Ultra Natural and Ultra Refined are trademarks of BioChemica International, Inc.

Xyliance is a trademark of Soliance.

Rev01/30/2013

All Natural Shea Butter/Cocoa Butter Lotion No. 589

	Wt. %
A VANATURAL [®] Bentonite Clay	2.5
VANZAN [®] NF Xanthan Gum	0.5
Water	78.0
B Cetearyl Wheat Straw Glycosides (and) Cetearyl Alcohol (Xyliance ^{™1})	5.0
Orbignya Oleifera Seed Oil (Cropure [®] Babassu ²)	5.0
Simmondsia Chinensis (Jojoba) Seed Oil (Jojoba Oil Golden ³)	5.0
Butyrospermum Parkii (Shea) Butter (Tomaso Shea Butter ⁴)	2.0
Theobroma Cacao (Cocoa) Seed Butter (Cocoa Butter NF ⁵)	2.0
C Preservative	q.s.

Procedure: While heating the water to 70-75°C, slowly add the **VANATURAL**[®] 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 70-75°C. Blend the Part B oil phase 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.

RAW MATERIAL SUPPLIERS
¹Givaudan Active Beauty, New York, NY

²Croda, Inc., Edison, NJ

³Desert Whale Jojoba Co., Inc., Tucson, AZ

⁴Tri-K Industries, Inc., Northvale, NJ

⁵RITA Corporation, Crystal Lake, IL

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Cropure is a registered trademark of Croda, Inc.

Xyliance is a trademark of Soliance.

Rev01/21/2013

Cracked Skin Lotion No. 586

	Wt. %
A VANATURAL [®] or VANATURAL MC Bentonite Clay	2.50
Water	73.25
Avena Sativa (Oat) Kernel Flour (Tech-O [®] #11-070 Oat Flour ¹)	1.00
VANZAN [®] NF Xanthan Gum	0.50
Sucrose Stearate (Sisterna [®] SP50-C ²)	1.75
B Sodium PCA (Ajidew [®] NL-50 ³)	3.00
Glycerin, 96%	5.00
C Glyceryl Stearate (and) PEG-100 Stearate (Arlacel [®] 165-PW (AP) ⁴)	2.00
Hydrogenated Polyisobutene (Parleam ^{®5})	4.00
Mineral Oil (and) Lanolin Alcohol (Vilvanolin [™] L-101 ⁶)	3.00
Cetyl Alcohol (Crodacol [™] C95-PA-MH ⁴)	2.00
Isopropyl Myristate NF (RITA IPM ⁷)	2.00
D Preservative	q.s.
Citric Acid, 20%	q.s.

Procedure: While heating the water to 50-55°C, sift the **VANATURAL**[®] or **VANATURAL MC** into the water agitated at maximum available shear. Once dispersed, slowly sift in the oat flour. Mix until the **VANATURAL** or **VANATURAL MC** is fully hydrated and the oat flour is well dispersed. Add the **VANZAN**[®] **NF** and mix until dissolved. Add the sucrose stearate and mix until uniform. Add Part B ingredients and mix thoroughly. Maintain the water phase at 50-55°C. Blend the Part C oil phase ingredients and heat to 50-55°C. Add the oil phase to the water phase with good agitation; mix until uniform. Avoid incorporating air. Cool with mixing; add the preservative when the emulsion is <35°C. Adjust pH to 5.5 ± 0.5 with citric acid.

RAW MATERIAL SUPPLIERS

¹Beacon CMP Corporation, Kenilworth, NJ

²Sisterna B.V., The Netherlands (Dist. In US & Canada by MMP, Inc., South Plainfield, NJ)

³Ajinimoto USA, Inc., Fort Lee, NJ

⁴Croda, Inc., Edison, NJ

⁵Rossow USA, Inc., Matawan, NJ

⁶Lubrizol Advanced Materials, Inc., Cleveland, OH

⁷RITA Corporation, Crystal Lake, IL

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Arlacel is a registered trademark of Uniqema Americas LLC.

Crodacol is a trademark of Croda, Inc.

Parleam is a registered trademark of Rossow.

Sisterna is a registered trademark of Sisterna B.V.

Tech-O is a registered trademark of Beacon CMP Corporation.

Vilvanolin is a trademark of Lubrizol Advanced Materials, Inc.

rev01/18/2018

Oatmeal & Macadamia Cream No. 588

	Wt. %
A VANATURAL [®] Bentonite Clay	2.50
Water	82.25
Avena Sativa (Oat) Kernel Flour (Tech-O [®] #11-070 Oat Flour ¹)	1.00
VANZAN [®] NF Xanthan Gum	0.50
Sucrose Stearate (Surfhope [®] SE Cosme C-1811 ²)	1.25
B Butylene Glycol	5.00
C Macadamia Ternifolia Seed Oil (SCB Macadamia Oil ³)	4.50
Cetearyl Alcohol	3.00
D Preservative	q.s.

Procedure: While heating the water to 60-65°C, slowly add the **VANATURAL**[®] while mixing at maximum available shear. Once dispersed, slowly sift in the oat flour. Mix until the **VANATURAL** is fully hydrated and the oat flour is well dispersed. Add the **VANZAN**[®] NF and mix until dissolved. Add the sucrose stearate and mix until uniform. Add the butylene glycol and mix thoroughly. Maintain the water phase at 60-65°C. Blend the Part C oil phase ingredients 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; add Part D when the emulsion is <30°C.

RAW MATERIAL SUPPLIERS
¹Beacon CMP Corporation, Kenilworth, NJ

²Arch Personal Care Products L.P., South Plainfield, NJ

³Southern Cross Botanicals PTY Ltd., Lennox Head, NSW Australia

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

Surfhope is a registered trademark of Mitsubishi Chemical Corporation.

Tech-O is a registered trademark of Beacon CMP Corporation.

Rev12/15/2014

Skin Softening Cream No. 575

	Wt.%
A VANATURAL[®] or VANATURAL MC Bentonite Clay	2.0
Water	72.2
Butylene Glycol	5.0
B Glyceryl Stearate SE (Cutina [®] GMS SE ¹)	9.0
Cetyl Alcohol (Croda [™] C-95 NF ²)	1.2
Caprylic/Capric Triglyceride (Neobee [®] M-5 Cosmetic ³)	1.5
C12-15 Alkyl Benzoate (Finsolv [®] TN ⁴)	4.6
Decyl Oleate (Tegosoft [®] DO ⁵)	2.0
PEG-14 Dimethicone (Abil [®] B 8843 ⁵)	0.5
Phenyl Trimethicone (Dow Corning [®] 556 Cosmetics Grade Fluid ⁶)	2.0
C Preservative	q.s.

Procedure: While heating the water to 75°C, slowly add the **VANATURAL[®]** or **VANATURAL MC** while mixing at maximum available shear. Mix until fully hydrated. Add the butylene glycol, mixing until uniform. Maintain the water phase at 75°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
¹Cognis Corporation, Ambler, PA

²Croda, Inc., Edison, NJ

³Stepan Company, Northfield, IL

⁴Innospec Active Chemicals, Edison, NJ

⁵Evonik Goldschmidt Chemical Corporation, Hopewell, VA

⁶Dow Corning Corporation, Midland, MI

TRADEMARKS
VANATURAL is a registered trademark of Vanderbilt Minerals, LLC.

Abil is a registered trademark of Goldschmidt GmbH Corporation.

 Croda[™] is a trademark of Croda, Inc.

Cutina is a registered trademark of Cognis IP Management GmbH.

Dow Corning is a registered trademark of Dow Corning Corporation.

Finsolv is a registered trademark of Innospec Performance Chemicals Company.

Neobee is a registered trademark of Stephan Company.

Tegosoft is a registered trademark of Goldschmidt GmbH.

Rev04/17/2017

Rejuvenating Lotion No. 574

	Wt. %
A	VANATURAL[®] or VANATURAL MC Bentonite Clay 2.0
	VANZAN[®] NF Xanthan Gum 0.5
	Water 72.5
	Butylene Glycol 3.0
B	Cyclomethicone (and) Dimethicone (and) Petrolatum (Gel Base BSM-PT ¹) 7.0
	C12-15 Alkyl Benzoate (Finsolv [®] TN ²) 4.0
	Cetearyl Alcohol 1.0
	Glyceryl Stearate (and) PEG-100 Stearate (Arlacel [®] 165 ³) 5.0
C	Water (and) Aloe Barbedensis Leaf Extract (and) Yeast (Sacchromyces) 5.0
	Extract (Betavera ^{®1})
	Preservative q.s.

Procedure: While heating the water to 70-75°C, slowly add the **VANATURAL[®]** or **VANATURAL MC** 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, mixing until uniform. Maintain the water phase at 70-75°C. Blend the Part B oil phase 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 the Part C ingredients in order when the emulsion is <30°C.

RAW MATERIAL SUPPLIERS

¹Arch Personal Care Products L.P., South Plainfield, NJ

²Innospec Active Chemicals, Edison, NJ

³Croda, Inc., Edison, NJ

TRADEMARKS

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

Arlacel is a registered trademark of Uniqema Americas LLC.

Betavera is a registered trademark of Arch Personal Care Products L.P.

Finsolv is a registered trademark of Innospec Performance Chemicals Company.

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