



ETHNIC SKIN & HAIR 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. **VANATURAL** bentonite is in full compliance with the rules established by the USDA National Organic Program (NOP). The NOP provides regulations and guidance for raw materials used in products claimed as organic or that contain organic ingredients (7CFR 205.600 through 205.607). Bentonite is listed as an allowed component in such products. **VANATURAL** bentonite is therefore recommended for use in organic personal care products.

VANZAN Xanthan Gum (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 are 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 the proper hydration of the clay and the formation of the colloidal structure. 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 suggested minimum mixing times 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	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 glycol or alcohol before addition to the aqueous phase, or 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 FORMULATIONS

Smectite Clays:

- VANATURAL** Rapidly hydrating high purity bentonite clay.
- VEEGUM Ultra** A unique acidic smectite clay that is especially easy to hydrate.
- VEEGUM R** The standard grade for a wide range of applications.
- VEEGUM HS** A fast hydrating grade with maximum electrolyte stability.

Xanthan Gum:

- VANZAN NF** The standard personal care grade.

rev. 4/16/2019

FORMULARY

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Natural Exfoliant Scrub No. 576	35

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

Soothing Organic Skin Lotion with Calendula Extract No. 595

		Wt. %
A	VANATURAL [®] Bentonite Clay	2.5
	VANZAN [®] NF Xanthan Gum	0.5
	Water	71.0
B	Cetearyl Wheat Straw Glycosides (and) Cetearyl Alcohol (Xyliance ^{TM1})	5.0
	Butyrospermum Parkii (Shea) Butter (Shea Butter-Ultra Refined TM Certified Organic ²)	3.5
	Theobroma Cacao (Cocoa) Seed Butter (Cocoa Butter-Ultra Natural TM Certified Organic ²)	3.5
	Persea Gratissima (Avocado) Oil (Avocado Oil Certified Organic ²)	6.0
	Simmondsia Chinensis (Jojoba) Seed Oil (Jojoba Oil-Natural Golden-Certified Organic ²)	3.0
C	Glycerin (and) Water (and) Calendula Officinalis Flower Extract (Certified Organic Calendula Extract ³)	5.0
	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. Maintain the water phase temperature at 75°C. Combine Part B ingredients and heat to 75°C. Add Part B oil phase to Part A water phase and mix thoroughly. Cool with mixing; add Part C ingredients when the emulsion is <30°C and mix thoroughly.

RAW MATERIAL SUPPLIERS
¹Actives International, Allendale, NJ

²BioChemica Int'l, Inc., Melbourne, FL

³Bio-Botanica, Inc., Hauppauge, NY

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Xyliance is a trademark of Soliance.

Rev01/31/2013

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

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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.

Rev04/17/2017

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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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.

Vitamin-Enriched Skin Cream with Natural Moisturizers No. 545

		Wt.%
A	VEEGUM[®] R Magnesium Aluminum Silicate	1.00
	VANZAN[®] NF Xanthan Gum	0.25
	Water	79.75
B	Butylene Glycol	5.00
	Disodium EDTA	0.20
	D-Panthenol USP	0.20
C	Macadamia Ternifolia Nut Oil (Australian Macadamia Nut Oil – Cosmetic Grade ¹)	4.50
	Polyglyceryl-3 Distearate (Cremophor [®] GS32 ²)	3.00
	Ceteareth-25 (Cremophor [®] A25 ²)	1.50
	Cetearyl Alcohol	3.00
	Tocopherol Acetate (Vitamin E Acetate Oil USP, FCC ²)	0.50
D	Retinyl Palmitate (Vitamin A Palmitate ²)	0.10
E	Hyaluronic Acid (and) Water (Lipo Hyaluronic Acid 1% Solution) ³	1.00
	Preservative	q.s.

Procedure: While heating the water to 60-65°C, 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 until uniform. Maintain the water phase at 60-65°C. Blend the Part C oil phase ingredients and heat to 60-65°C. Add Part C to Part A/B with good agitation. Cool with mixing. At 40-45°C add Part D. At 30°C add Part E. Adjust as necessary to pH 6.5 ± 0.5.

RAW MATERIAL SUPPLIERS
¹Southern Cross Botanicals PTY Ltd, Lennox Head, NSW, Australia

²BASF Corporation, Florham Park, NJ

³Vantage Specialty Ingredients (formerly Lipo Chemicals), Warren, NJ

TRADEMARKS
VEEGUM and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC. Cremophor is a registered trademark of BASF SE.

Rev11/02/2017

Conditioning Skin Cream with Jojoba Oil No. 571

	Wt. %
A VANATURAL[®] or VANATURAL MC Bentonite Clay	2.0
Water	73.0
Butylene Glycol	5.0
B Bis-PEG/PPG-16/16 PEG/PPG-16/16 Dimethicone; Caprylic/capric triglyceride (Abil [®] Care 85 ¹)	1.5
Cetyl Alcohol (and) Glyceryl Stearate (and) PEG-75 Stearate (and) Ceteth-20 (and) Steareth-20 (Emulium [®] Delta ²)	4.5
Cetyl Rinoleate (Tegosoft [®] CR ¹)	2.0
Simmondsia Chinesis (Jojoba) Seed Oil (Jojoba Oil Golden ³)	6.0
Cyclomethicone (XIAMETER [®] PMX-0345 Cyclosiloxane Blend ⁴)	6.0
C Preservative, Fragrance	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 the Part C ingredients when the emulsion is <30°C.

RAW MATERIAL SUPPLIERS

¹Evonik Goldschmidt Chemical Company, Hopewell, VA

²Gatefosse Corporation, Paramus, NJ

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

⁴Dow Corning Corporation, Midland, MI

TRADEMARKS

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Abil is a registered trademark of Goldschmidt GmbH Corporation.

Emulium is a registered trademark of Gatefosse SAS.

Tegosoft is a registered trademark of Goldschmidt GmbH.

Xiameter is a registered trademark of Dow Corning Corporation.

Rev04/17/2017

Oatmeal 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 1.00
	(Tech-O [®] #11-070 Oat Flour ¹)
	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

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

Rev12/15/2014

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 (Tomaso Shea Butter ⁴) 3.5
	Isopropyl Myristate (and) Glycine Soja (Soybean) Oil (and) Retinyl 1.0
	Palmitate (and) Carthamus Tinctorius (Safflower) Seed Oil (and) Linoleic 1.0
	Acid (and) Tocopherol (Vitamin Complex AEF OS ³)
	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 15.0
(and) Polyhydroxystearic Acid (and) Alumina (Solaveil® CT-100 ³)	
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
¹Innospec Active Chemicals, Edison, NJ

²Dow Corning Corporation, Midland, MI

³Croda, Inc., Edison, NJ

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

⁵BASF Care Creations, Florham Park, NJ

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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

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

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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

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

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Neo Heliopan is a registered trademark of Haarmann & Reimer GmbH.

Rev04/25/2013

Wash-Off Resistant Sunscreen Cream No. 515

	Wt.%
A	VEEGUM[®] Ultra Magnesium Aluminum Silicate 2.0
	Carbomer (Ultrez [™] 10 ¹) 0.2
	Water 47.8
B	Polysorbate 20 (Tween [®] 20 ²) 1.0
	Aqua (and) Titanium Dioxide (and) Alumina (and) Silica (and) Sodium 12.5
	Polyacrylate (and) Propylene Glycol (and) Diazolidinyl Urea (and) Methyl Paraben (and) Propyl Paraben (Tioveil [®] AQ-G ²) 3.0
	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 (Cutina [®] GMS SE ⁴) 3.0
	C12-15 Octanoate (Finester [™] EH-25 ⁵) 3.0
	Octylmethoxycinnamate (Parsol [®] MCX ⁶) 7.0
	Avobenzene (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 Avobenzene is not approved for use in the USA.

RAW MATERIAL SUPPLIERS

¹Lubrizon Advanced Materials, Inc., Cleveland, OH

²Croda, Inc., Edison, NJ

³Stepan Company, Northfield, IL

⁴BASF Care Creations, Florham Park, NJ

⁵Innospec Active Chemicals, Edison, NJ

⁶Givaudan Corporation, Teaneck, NJ

⁷Alzo International, Inc., Sayreville, NJ

⁸Dow 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.

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

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

Moisturizing Gel for Oily Skin with Hyaluronic Acid No. 554

	Wt.%
A Water	64.21
Sodium Hyaluronate (Lipo [®] Hyaluronic Acid, 1% Solution ¹)	1.00
Disodium EDTA	0.05
B Butylene Glycol (and) Water (and) Equisetum Hyemale Extract (Actiphtye [®] of Horsetail BG50P ²)	4.80
Butylene Glycol (and) Water (and) Hydrastis Canadensis (Golden Seal) Extract (Actiphtye [®] of Goldenseal BG50P ²)	4.80
Butylene Glycol (and) Water (and) Cymbopogon Schoenanthus Extract (Actiphtye [®] of Lemongrass BG50P ²)	4.80
Butylene Glycol (and) Water (and) Hamamelis Virginiana (Witch Hazel) Extract (Actiphtye [®] of Witch Hazel BG50P ²)	4.80
Butylene Glycol (and) Water (and) Humulus Lupulus (Hops) Extract (Actiphtye [®] of Hops BG50P ²)	4.80
C Water (and) Polysorbate 20 (and) PEG-40 Hydrogenated Castor Oil (and) Melaleuca Alternifolia (Tea Tree) Leaf Oil (Water-Soluble Tea Tree Oil ³)	9.70
VANZAN[®] NF-C Xanthan Gum	1.00
D Preservative	q.s.
E Triethanolamine	0.04

Procedure: Add Part A ingredients separately and mix thoroughly. Pre-blend Part B ingredients, add to the batch and mix until homogeneous. Add Part C ingredients separately, in the order shown. Sift the **VANZAN[®] NF-C** into an established vortex and mix until completely dissolved. The batch will thicken at this point. Add Part D and mix until homogeneous. Adjust pH to 6.5 ± 0.5 with triethanolamine.

RAW MATERIAL SUPPLIERS
¹Vantage Specialty Ingredients, Warren, NJ

²Lipotec USA, Inc., Lewisville, TX

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

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

Actiphtye is a registered trademark of Active Organics, LP.

Lipo is a registered trademark of Lipo Chemicals, Inc.

Rev11/27/2018

Thioglycolate Relaxer No. 277

	Wt.%
A VEEGUM® HS Magnesium Aluminum Silicate	2.0
Water	52.0
B Cetyl Alcohol	15.0
Petrolatum	5.0
Mineral Oil	8.0
Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165 VEG ¹)	5.0
C Ammonium Thioglycolate, 60%	11.0
Ammonium Hydroxide	2.0
D Preservative	q.s.

Procedure: While heating the water to 75-80°C, slowly add the **VEEGUM® HS** while agitating at maximum available shear. Continue mixing until fully hydrated. Blend the Part B oil phase ingredients and heat to 70°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool with mixing; combine Part C ingredients and slowly add when the emulsion is 35°C; mix until uniform. Add Part D.

RAW MATERIAL SUPPLIERS

¹Croda Inc., Edison, NJ

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
Arlacel is a registered trademark of Uniqema Americas LLC.

Rev01/31/2013

Hydroxide Relaxer No. 280

	Wt.%
A VEEGUM® HS Magnesium Aluminum Silicate	2.0
Water	55.0
B Cetyl Alcohol	15.0
Petrolatum	5.0
Mineral Oil	8.0
Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165 VEG ¹)	5.0
C Sodium Hydroxide, 20%	10.0
D Preservative	q.s.

Procedure: While heating the water to 75-80°C, slowly add the **VEEGUM® HS** while agitating at maximum available shear. Continue mixing until fully hydrated. Blend the Part B oil phase ingredients and heat to 70°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool with mixing. Slowly add Part C when the emulsion is 40°C; mix until uniform. Add Part D; mix until uniform.

RAW MATERIAL SUPPLIERS
¹Croda Inc., Edison, NJ

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

Arlacel is a registered trademark of Uniqema Americas LLC.

Rev01/31/2013

Bisulfite Relaxer No. 281

	Wt.%
A VEEGUM® HS Magnesium Aluminum Silicate	2.0
Water	57.0
B Cetyl Alcohol	10.0
Petrolatum	5.0
Mineral Oil	5.0
Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165 VEG ¹)	5.0
C Ammonium Carbonate	4.0
Water	10.0
Sodium Bisulfite	2.0
D Preservative	q.s.

Procedure: While heating the water to 75-80°C, slowly add the **VEEGUM® HS** while agitating at maximum available shear. Continue mixing until fully hydrated. Blend the Part B oil phase ingredients and heat to 70°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool with mixing. Prepare Part C by dissolving the ammonium carbonate in the water and slowly adding the sodium bisulfite (it will foam & bubble). Stir gently until the solution is clear. Slowly add Part C when the emulsion is 40°C; mix until uniform. Add Part D.

RAW MATERIAL SUPPLIERS
¹Croda Inc., Edison, NJ

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.
 Arlacel is a registered trademark of Uniqema Americas LLC.

Rev01/31/2013

Relaxer/Waving Lotion No. 285

	Wt.%
A VEEGUM® HS Magnesium Aluminum Silicate	1.0
Water	69.0
Cetyl Alcohol	1.0
Mineral Oil (and) Lanolin Alcohol (Vilvanolin™ L-101¹)	5.0
B Polysorbate 80 (and) Cetyl Acetate (and) Acetylated Lanolin Alcohol (Solulan® 98¹)	2.0
Mineral Oil	5.0
Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165 VEG²)	3.0
C Ammonium Thioglycolate, 60%	12.0
Ammonium Hydroxide	2.0
D Preservative	q.s.

Procedure: While heating the water to 75-80°C, slowly add the **VEEGUM® HS** while agitating at maximum available shear. Continue mixing until fully hydrated. 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 with mixing. Combine Part C and slowly add when the emulsion is 35°C; mix until uniform. Add Part D.

RAW MATERIAL SUPPLIERS

¹Lubrizol Advanced Materials, Inc., Cleveland, OH

²Croda Inc., Edison, NJ

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

Arlacel is a registered trademark of Uniqema Americas LLC.

Solulan is a registered trademark of The Lubrizol Corporation.

Vilvanolin is a trademark of Lubrizol Advanced Materials, Inc.

Rev01/31/2013

Pearlescent No Residue Conditioning Shampoo No. 488

		Wt. %
A	VEEGUM® Ultra Magnesium Aluminum Silicate	2.00
	Deionized 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 (Monamid® 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. Add Part D

RAW MATERIAL SUPPLIERS¹EMD Chemicals, Inc./RONA, Gibbstown, NJ²Stepan Company, Northfield, IL³Rhodia, Inc., Cranbury, NJ**TRADEMARKS****VEEGUM** is a registered trademark of Vanderbilt Minerals, LLC.

Monamid is a registered trademark of Mona Industries, Inc.

Steol is a registered trademark of Stepan Company.

Timiron is a registered trademark of EM Industries, Incorporated.

Rev01/31/2013

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

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

Crodafos is a trademark of Croda, Inc.

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

Depilatory Cream No. 614

	Wt. %	
A	Deionized Water	75.0
	VEEGUM® CH Magnesium Aluminum Silicate	2.0
	Hydroxyethyl Cellulose (Cellosize® HEC AP-440-H (Cosmetic Grade) ¹)	2.0
	Sodium Gluceptate (Sodium Glucoheptonate) (Chelating Agent)	q.s.
	1,3-butanediol (Butylene Glycol)	5.0
B	Cetearyl Alcohol (and) Cetearth-20 (Hallstar® NCD-20 ²)	3.0
	C12-15 Alkyl Benzoate (Finsolv® TN ³)	1.5
	Crambe Abyssinica Seed Oil (Fancor® Abyssinian Oil ⁴)	2.5
C	Calcium Thioglycolate Trihydrate ⁵	7.5
	Calcium Hydroxide (Calcium Hydroxide 802 USP ⁶)	1.5

Procedure: Begin heating the water to 55-60°C. Sift the **VEEGUM® CH** into an established vortex in the water. Mix until fully hydrated. Sift in the hydroxyethyl cellulose and mix until dissolved. Then add in the rest of Part A ingredients and, if necessary, adjust the batch temperature to 55-60°C. Combine Part B ingredients and heat to 55-60°C. When Part A and Part B are both at 55-60°C, add Part B to Part A slowly with adequate mixing to emulsify. Cool with mixing to ~30°C. Then, slowly add Part C ingredients and mix thoroughly after each.

RAW MATERIAL SUPPLIERS
¹Dow Chemical, Midland, MI

²HallStar, Chicago, IL

³Innospec Active Chemicals, Edison, NJ

⁴Elementis Specialties, Hightstown, NJ

⁵Bruno Bock, Marschacht, Germany

⁶Brenntag Specialties, Inc., South Plainfield, NJ

TRADEMARKS
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Cellosize is a registered trademark of Union Carbide Chemicals & Plastics Technology Corp.

Fancor is a registered trademark of Elementis Specialties, Inc.

Finsolv is a registered trademark of Innospec Performance Chemicals Company.

Hallstar is a registered trademark of Hallstar Innovations Corporation.

Rev06/03/2016

Depilatory Lotion No. 286

	Wt.%
A VEEGUM® HS Magnesium Aluminum Silicate	1.0
Water	74.0
Propylene Glycol	5.0
B Mineral Oil (and) Lanolin Alcohol (Vilvanolin™ L-101 ¹)	5.0
Polysorbate 80 (and) Cetyl Acetate (and) Acetylated Lanolin Alcohol (Solulan® 98 ¹)	2.0
Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165 VEG ²)	2.0
C Calcium Thioglycolate	5.0
Calcium Hydroxide	6.0
D Preservative	q.s.

Procedure: While heating the water to 75-80°C, slowly add the **VEEGUM® HS** while agitating at maximum available shear. Continue mixing until fully hydrated. Add the propylene glycol. Maintain temperature at 75-80°C. Blend the Part B oil phase ingredients and heat to 70°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool with mixing. Slowly add Part C ingredients individually when the emulsion is 35°C; mix until uniform after each. Add Part D.

RAW MATERIAL SUPPLIERS
¹Lubrizol Advanced Materials, Inc., Cleveland, OH

²Croda Inc., Edison, NJ

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

Arlacel is a registered trademark of Uniqema Americas LLC.

Solulan is a registered trademark of The Lubrizol Corporation.

Vilvanolin is a trademark of Lubrizol Advanced Materials, Inc.

Rev01/31/2013

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

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

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
¹Dow Corning Corporation, Midland, MI

TRADEMARKS
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Rev04/25/2013

After Shaving Balm with Hyaluronic Acid No. 558

	Wt. %
A	VEEGUM[®] R Magnesium Aluminum Silicate 1.0
	VANZAN[®] NF Xanthan Gum 0.5
	Water 93.1
B	Water (and) Triticum Vulgare (Wheat) Germ Extract (and) Saccharomyces 4.0
	Cerevisiae Extract (and) Sodium Hyaluronate (Eashave ^{™1})
	Bisabolol ((±)-alpha-Bisabolol Synthetic ²) 0.2
	Aloe Barbadosensis Leaf Juice (Aloe Vera Gel Regular 40X-AG046 ³) 1.0
	Allantoin 0.2
C	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 the Part B ingredients in the order listed and mix until uniform. Add Part C and mix until uniform. Adjust as necessary to pH 6.5 ± 0.5.

RAW MATERIAL SUPPLIERS
¹Pentapharm Ltd., Basel, Switzerland/
Centerchem, Inc., Norwalk, CT

²BASF Corporation, Florham Park, NJ

³Terry Laboratories, Inc., Melbourne, FL

TRADEMARKS
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Eashave is a trademark of Pentapharm Ltd.

Rev11/29/2018

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
Cetareth-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 70-75°C, 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 70-75°C. Combine 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 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

¹DuPont Tate & Lyle Bio Products Company, LLC, Wilmington, DE

²BASF Corporation, Florham Park, NJ

³Dow Corning Corporation, Midland, MI

⁴Croda, Inc., Edison, NJ

⁵Symrise, Teterboro, NJ

⁶Sabinsa Corporation, Piscataway, NJ

TRADEMARKS

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Arlacel is a registered trademark of Uniqema Americas LLC.

Cremophor is a registered trademark of BASF Aktiengesellschaft.

Neo Heliopan 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

Fade Cream No. 283

	Wt.%
A VEEGUM® K Magnesium Aluminum Silicate	2.00
Water	68.05
B Glycerin	4.00
Triethanolamine	1.00
C Stearic Acid	2.00
Cetyl Alcohol	4.00
Isopropyl Myristate	2.00
Mineral Oil (and) Lanolin Alcohol (Vilvanolin™ L-101 ¹)	10.00
Glyceryl Stearate (and) PEG-100 Stearate (Arlacel® 165 VEG ²)	3.00
D Citric Acid	0.30
Hydroquinone*	3.00
Sodium Sulfite	0.40
Sodium Metabisulfite	0.25
E Preservative	q.s.

Procedure: While heating the water to 75°C, slowly add the **VEEGUM® K** while agitating at maximum available shear. Continue mixing until fully hydrated. Blend Part B and maintain temperature at 75°C. Blend the Part C oil phase ingredients and heat to 70°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool with mixing; add the citric acid at 65°C, the hydroquinone at 55°C, and the sodium sulfite and sodium metabisulfite at 45°C. Mix until cool and uniform.

*Consult local regulations concerning the use of hydroquinone.

RAW MATERIAL SUPPLIERS

¹Lubrizol Advanced Materials, Inc., Cleveland, OH

²Croda Inc., Edison, NJ

TRADEMARKS

VEEGUM is a registered trademark of Vanderbilt Minerals, LLC.

Arlacel is a registered trademark of Uniqema Americas LLC.

Vilvanolin is a trademark of Lubrizol Advanced Materials, Inc.

Rev01/31/2013

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 SUPPLIERS
¹Uniqema, New Castle, DE

²Lubrizol 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

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

¹DuPont Tate & Lyle Bio Products Company, LLC, Wilmington, DE

²Croda, Inc., Edison, NJ

³Protameen, Totowa, NJ

⁴Dow Corning Corporation, Midland, MI

TRADEMARKS

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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

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

TRADEMARKS

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

Rev01/21/2013

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

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Surfhope is a registered trademark of Mitsubishi Chemical Corporation.

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

Rev01/30/2013

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)	1.50
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

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