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# VANDERBILT *Formulary* No. 925

Helping You  
Formulate  
For Them!



**R. T. Vanderbilt Company, Inc.**  
INDUSTRIAL MINERALS AND CHEMICALS

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## ANIMAL CARE FORMULARY

**VANATURAL<sup>®</sup> Bentonite Clay**

**VEEGUM<sup>®</sup> Magnesium Aluminum Silicate**

**VANZAN<sup>®</sup> Xanthan Gum**

The smectite clays, **VEEGUM** Magnesium Aluminum Silicate and **VANATURAL** Bentonite Clay, along with **VANZAN** Xanthan Gum, provide a natural solution to the challenge of effectively controlling the rheology and stability of animal care formulations. Dental pastes and gels extrude easily, cling to brush or finger, and spread easily on teeth. Topical emulsions remain stable even at elevated temperatures. Active ingredients remain uniformly suspended for exact dosing. Cleansing products are creamy and drip-free. In addition, **VANATURAL** Bentonite Clay is suitable for use in topical and cleansing preparations that are marketed as organic or as containing organic ingredients.

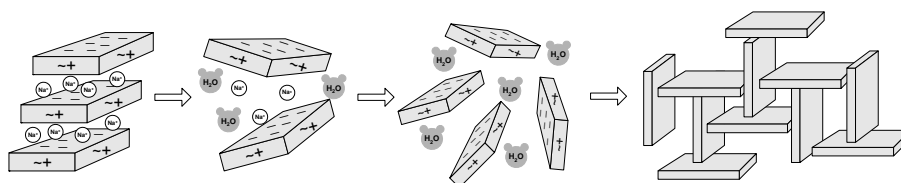
### VANATURAL AND VEEGUM CLAYS

<b>VANATURAL</b>	Rapidly hydrating, high purity bentonite clay for most animal care applications.
<b>VEEGUM Ultra</b>	A unique acidic smectite clay that is especially easy to hydrate.
<b>VEEGUM</b>	The standard grade for a wide range of applications.
<b>VEEGUM HS</b>	The most electrolyte-tolerant grade. Purified Bentonite NF

#### How They Work

Each clay granule is composed of millions of flake-shaped particles stacked in sandwich fashion with a layer of water between each. A single flake is one nanometer thick and up to several hundred nanometers across. The faces of these flakes carry a negative charge, while edges have a slightly positive charge. The net negative charge of the flake is balanced by sodium ions.

When clay and water are mixed, water penetrates between the flakes, forcing them further apart. Diffusion and osmosis then promote delamination until the flakes are completely separated. The speed with which platelet separation occurs is directly related to the amount of energy introduced during hydration. Both mechanical and thermal energy accelerate hydration: high shear mixing or warm water reduces hydration time. Once the clay is hydrated (i.e., the flakes are separated) the weakly positive flake edges are attracted to the negatively charged faces. A three dimensional colloidal structure forms that accounts for the characteristic stabilizing and thickening properties imparted by these clays.

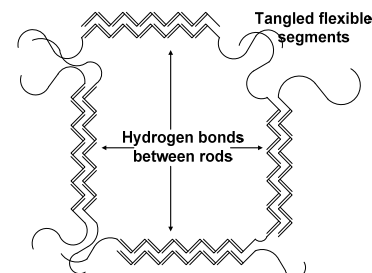


### VANZAN XANTHAN GUM

<b>VANZAN NF</b>	The standard grade for most animal care applications.
<b>VANZAN NF-C</b>	Produces clear solutions; used when product clarity is essential.

#### How They Work

The xanthan polymer's backbone is cellulose to which are attached trisaccharide side chains with the carboxylate groups that give the gum its negative charge. In solutions of low ionic strength or at high temperature, the xanthan gum chains adopt a random coil configuration, because the anionic side chains are mutually repulsed. A small amount of electrolyte reduces this repulsion, allowing the side chains to wrap around and hydrogen bond to the backbone, forming a helical rod. At electrolyte concentrations  $> \sim 0.15M$ , the rigid helical rod is retained up to  $100^{\circ}C$ . A colloidal network forms, based on hydrogen bonding between the helical rods and polymer entanglement. This colloidal network makes xanthan gum an efficient thickener and stabilizer for water-based applications, and an effective synergist with **VANATURAL** and **VEEGUM** clays.



## EQUINE CARE

### Rubifacient Liniment No. A369

	Wt. %
<b>A</b>   VEEGUM <sup>®</sup> Magnesium Aluminum Silicate	1.5
Water	54.7
FG-10 Antifoam <sup>1</sup>	0.2
Propylene Glycol	3.0
<b>B</b>   Methyl Salicylate	15.0
Menthol	5.0
Polysorbate 80 (Tween <sup>®</sup> 80 <sup>2</sup> )	0.6
C <sub>18</sub> -C <sub>36</sub> Acid (Syncrowax <sup>™</sup> AW1-C <sup>3</sup> )	5.0
Glyceryl Stearate (and) PEG-100 Stearate (Arlacel <sup>®</sup> 165 <sup>2</sup> )	5.0
<b>C</b>   Preservative	qs

<sup>1</sup>Dow Corning Corporation, Midland, MI

<sup>2</sup>Uniqema, New Castle, DE

<sup>3</sup>Croda, Inc., Edison, NJ

**Procedure:** While heating the water to 75-80°C, slowly add the VEEGUM to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining Part A ingredients and mix until uniform. 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.

### Natural Anti-Irritant Liniment No. A558

	Wt. %
<b>A</b>   VEEGUM Magnesium Aluminum Silicate	1.0
VANZAN <sup>®</sup> NF Xanthan Gum	0.5
Water	92.6
Water (and) Triticum Vulgare (Wheat ) Germ Extract (and) Saccharomyces Cerevisiae Extract (and) Sodium Hyaluronate (Eashave <sup>™1</sup> )	4.0
<b>B</b>   Bisabolol ((±)-alpha-Bisabolol Synthetic <sup>2</sup> )	0.2
Aloe Barbadensis Leaf Juice (Aloe Vera Gel Regular 40X-AG046 <sup>3</sup> )	1.0
Allantoin	0.2
Spray Dried Menthol	0.5
<b>C</b>   Preservative	qs

<sup>1</sup>Pentapharm Ltd., Basel, Switzerland/Centerchem, Inc., Norwalk, CT

<sup>2</sup>BASF Corporation, Florham Park, NJ

<sup>3</sup>Terry Laboratories, Melbourne, FL

**Procedure:** Slowly add the VANATURAL and VANZAN 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.

### Instant Poultice No. A590

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

<sup>1</sup>Beacon CMP Corporation., Kenilworth, NJ

**Procedure:** Dry blend all ingredients.

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

### Analgesic Liniment No. A360

	Wt. %
<b>A</b>   VEEGUM Magnesium Aluminum Silicate	1.5
Water	56.8
Propylene Glycol	3.0
Simethicone (FG-10 Antifoam <sup>1</sup> )	0.2
<b>B</b>   Mineral Oil	10.0
Acetylated Lanolin Alcohol (Acetulan <sup>®2</sup> )	7.0
Menthol USP	1.0
Benzocaine USP	5.0
Polysorbate 60 (Tween 60 <sup>3</sup> )	0.5
C <sub>18</sub> -C <sub>36</sub> Acid (Syncrowax <sup>™</sup> AW1-C <sup>4</sup> )	3.0
Glyceryl Stearate (and) PEG-100 Stearate (Arlacel <sup>®</sup> 165 <sup>3</sup> )	12.0
<b>C</b>   Preservative	qs

<sup>1</sup>Dow Corning Corporation, Midland, MI

<sup>2</sup>Lubrizol Advanced Materials, Inc., Cleveland, OH

<sup>3</sup>Uniqema, New Castle, DE

<sup>4</sup>Croda, Inc., Edison, NJ

**Procedure:** While heating the water to 75-80°C, slowly add the VEEGUM to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining Part A ingredients and mix until uniform. 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.

### Cleansing Liniment Gel No. A557

	Wt. %
<b>A</b>   VANZAN NF-C Xanthan Gum	1.00
Water	80.75
Disodium EDTA	0.05
Bisabolol (Alpha-Bisabolol Natural <sup>1</sup> )	0.20
Ethanol, 96%	15.00
<b>B</b>   Panthenol (and) Propylene Glycol (D-Panthenol 50P <sup>1</sup> )	1.00
PEG-40 Hydrogenated Castor Oil (Cremophor <sup>®</sup> CO40 <sup>1</sup> )	0.20
<b>C</b>   Preservative	qs

<sup>1</sup>BASF Corporation, Florham Park, NJ

**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. 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.

### Instant Poultice No. A591

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

<sup>1</sup>Terry Laboratories, Melbourne, FL

<sup>2</sup>Beacon CMP Corporation, Kenilworth, NJ

<sup>3</sup>Qaroma, Baytown, TX

**Procedure:** Dry blend all ingredients.

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

**Hoof Cleaner No. A576**

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

<sup>1</sup>Cognis Corporation, Ambler, PA<sup>2</sup>Stepan Company, Northfield, IL<sup>3</sup>Active Organics Inc., Lewisville, TX<sup>4</sup>Southern Cross Botanicals PTY Ltd, Lennox Head, NSW, Australia<sup>5</sup>Mt. Pulaski Products, Inc., Mt. Pulaski, IL

**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.

**Veterinary Cream No. A545**

		Wt. %
<b>A</b>	<b>VEEGUM</b> Magnesium Aluminum Silicate	1.00
	<b>VANZAN NF</b> Xanthan Gum	0.25
	Water	79.75
<b>B</b>	Butylene Glycol	5.00
	Disodium EDTA	0.20
	D- Panthenol USP	0.20
<b>C</b>	Macadamia Ternifolia Nut Oil (Australian Macadamia Nut Oil – Cosmetic Grade <sup>1</sup> )	4.50
	Polyglyceryl-3 Distearate (Cremophor <sup>®</sup> GS32 <sup>2</sup> )	3.00
	Cetareth-25 (Cremophor A25 <sup>2</sup> )	1.50
	Cetearyl alcohol	3.00
	Tocopherol Acetate (Vitamin E Acetate Oil USP, FCC <sup>2</sup> )	0.50
<b>D</b>	Retinyl Palmitate (Vitamin A Palmitate <sup>2</sup> )	0.10
<b>E</b>	Hyaluronic Acid (and) Water (Lipo Hyaluronic Acid 1% solution <sup>3</sup> )	1.00
	Preservative	qs

<sup>1</sup>Southern Cross Botanical Pty Ltd, Lennox Head, NSW Australia<sup>2</sup>BASF Corporation, Florham Park, NJ<sup>3</sup>Lipo Chemicals, Paterson, NJ

**Procedure:** While heating the water to 60-65°C, slowly add the **VEEGUM** 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. 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.

**Protectant Hoof Cream No. A490**

		Wt. %
<b>A</b>	<b>VEEGUM</b> <sup>®</sup> <i>Ultra</i> Magnesium Aluminum Silicate	0.80
	Carbomer (Carbopol <sup>®</sup> 934 <sup>1</sup> )	0.30
	Deionized Water	79.00
<b>B</b>	Glycerin	2.00
	Butylene Glycol	2.00
<b>C</b>	Cetyl Alcohol	0.50
	Glyceryl Monostearate SE (Dermalcare <sup>®</sup> GMS SE <sup>2</sup> )	2.00
	Caprylic/Capric Triglyceride (Neobee <sup>®</sup> M-5 <sup>3</sup> )	2.00
	C <sub>12-15</sub> Octanoate (Finester <sup>™</sup> EH-25 <sup>4</sup> )	2.00
	Castor Oil Polyurethane (Polyderm <sup>®</sup> PPI CO <sup>5</sup> )	1.00
	Phenyl Dimethicone (DC 556 Fluid <sup>6</sup> )	3.00
	Dimethicone (DC 200 Fluid, 350 cSt <sup>6</sup> )	1.00
	Bois Oil	0.50
	Steareth-2 (Brij <sup>®</sup> 72 <sup>7</sup> )	0.95
	Steareth-21 (Brij <sup>®</sup> 721 <sup>7</sup> )	0.95
<b>D</b>	Panthenol	1.00
	Vitamin E Acetate	0.50
	Vitamin A Palmitate	0.50
<b>E</b>	Preservative	q.s.

<sup>1</sup>Lubrizol Advanced Materials, Inc., Cleveland, OH<sup>2</sup>Rhodia Inc., Cranbury, NJ<sup>3</sup>Stepan Company., Northfield, IL<sup>4</sup>Innospec Active Chemicals, Edison, NJ<sup>5</sup>Alzo International Inc., Sayreville, NJ<sup>6</sup>Dow Corning Corporation, Midland, MI<sup>7</sup>Uniqema, New Castle, DE

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

**Veterinary Cream No. A571**

		Wt. %
<b>A</b>	<b>VANATURAL</b> Bentonite Clay	2.0
	Water	73.0
	Butylene Glycol	5.0
<b>B</b>	Bis-PEG/PPG-16/16 PEG/PPG-16/16 dimethicone; Caprylic/capric triglyceride (Abil <sup>®</sup> Care 85 <sup>1</sup> )	1.5
	Cetyl Alcohol (and) Glyceryl Stearate (and) PEG-75 stearate (and) Ceteth-20 (and) Steareth-20 (Emulium <sup>®</sup> Delta <sup>2</sup> )	4.5
	Cetyl Rinoleate (Tegosoft <sup>®</sup> CR <sup>1</sup> )	2.0
	Simmondsia Chinesis (Jojoba) Seed Oil (Jojoba Oil Golden <sup>3</sup> )	6.0
	Cyclomethicone (Dow Corning 345 Fluid <sup>4</sup> )	6.0
<b>C</b>	Preservative	qs

<sup>1</sup>Degussa Goldschmidt Chemical Corporation, Hopewell, VA<sup>2</sup>Gattefosse Corporation, Paramus, NJ<sup>3</sup>Desert Whale Jojoba Co., Inc., Tuscon, AZ<sup>4</sup>Dow Corning Corporation, Midland, MI

**Procedure:** While heating the water to 75°C, slowly add the **VANATURAL** 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.

**Spray Shampoo No. A500**

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

<sup>1</sup>Stepan Company, Northfield, IL<sup>2</sup>Rhodia, Inc., Cranbury, NJ<sup>3</sup>Uniqema, New Castle, DE<sup>4</sup>Floratech Americas., Chandler, AZ

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

**Sensitive Skin Washing Cream No. A505**

		Wt. %
A	VEEGUM <i>Ultra</i> Magnesium Aluminum Silicate	2.0
	Water	63.0
B	Sodium Cocoyl Isothionate (Tauranol® I-78 <sup>1</sup> )	25.0
	Cocamidopropyl Hydroxysultaine (Mirataine® CBS <sup>2</sup> )	10.0
C	Preservative	q.s.

<sup>1</sup>Innospec Active Chemicals, Edison, NJ<sup>2</sup>Rhodia, Inc., Cranbury, NJ

**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.

**PET CARE****Washing Gel with Tea Tree Oil No. A556**

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

<sup>1</sup>Stepan Company, Northfield, IL<sup>2</sup>Cognis Corporation, Ambler, PA<sup>3</sup>Southern Cross Botanicals Pty Ltd, Lennox Head, NSW, Australia

**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.

**Oatmeal & Aloe Vera Cream Pet Shampoo No. A585**

		Wt. %
A	VANATURAL® Bentonite Clay	3.5
	Water	58.0
	Avena Sativa (Oat ) Kernel Flour (Tech-O® #11-070 Oat Flour <sup>1</sup> )	1.0
B	Sodium Laureth Sulfate (Calfoam® ES-302 <sup>2</sup> )	25.0
	Cocamidopropyl Betaine (Caltaine® C-35 <sup>2</sup> )	9.0
	Modified Oleamide DEA (Calamide® F <sup>2</sup> )	2.5
	Aloe Barbadosensis Leaf Juice (Aloe Vera Gel, Regular 40X <sup>3</sup> )	1.0
C	Preservative	q.s.
D	Citric Acid, 20%	q.s.

<sup>1</sup>Beacon CMP Corporation, Kenilworth, NJ<sup>2</sup>Pilot Chemical Company, Cincinnati, OH<sup>3</sup>Terry Laboratories, Melbourne, FL

**Procedure:** Slowly add the VANATURAL to the water while mixing at maximum available shear. Once dispersed, slowly sift in the oat flour. Continue mixing until the VANATURAL is fully hydrated and the oat flour is well dispersed. Reduce the mixing speed to avoid air entrapment. Add the Part B ingredients in the order shown, mixing after each addition until smooth and uniform. Add Part C and adjust as necessary to pH 5.5 ± 0.5 with citric acid.

**Sulfur and Salicylic Acid Shampoo No. A583****Sulfur Shampoo No. A584**

		Wt. %	Wt. %
A	VEEGUM HS	2.00	2.00
	Magnesium Aluminum Silicate	0.50	0.50
	VANZAN NF Xanthan Gum	77.25	79.25
B	Water	1.25	1.25
	Sucrose Stearate (Surfhope® SE Cosme C-1811 <sup>1</sup> )	1.00	1.00
	Cetyl Alcohol	4.00	4.00
C	Glycerin	2.00	2.00
	Wettable Sulfur (Yellow Jacket® Wettable Sulfur II <sup>2</sup> )	10.00	10.00
	Sodium Laureth Sulfate	2.00	----
	Salicylic Acid, USP	qs	qs
D	Preservative	qs	----
	Sodium Hydroxide, 50%	qs	----

<sup>1</sup>Arch Personal Care Products L.P., South Plainfield, NJ<sup>2</sup>Georgia Gulf Sulfur Corp., Valdosta, Georgia

**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 No. 583 to approximately pH 4.5 with sodium hydroxide solution.

**Pet Toothpaste No. A582**

		<b>Wt. %</b>
<b>A</b>	<b>VANATURAL</b> Bentonite Clay	1.00
	<b>VANZAN NF</b> Xanthan Gum	0.50
	Water	47.25
<b>B</b>	Tetrasodium Pyrophosphate (Food Grade)	1.00
	Methyl Paraben, NF	0.20
	Propyl Paraben, NF	0.05
	Sorbitol, 70%	10.00
	Glycerin	10.00
	Hydrated Silica (Zeodent® 113 <sup>1</sup> )	30.00

<sup>1</sup>J.M Huber Corporation, Havre de Grace, MD

**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. Add the Part B ingredients in the order listed, mixing thoroughly after each until uniform.

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Cremophor is a registered trademark of BASF Aktiengesellschaft Corporation.  
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02/2008

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