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VANDERBILT

Formulary



VEEGUM[®]
in
Face Masks
Formulary No. 915

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VEEGUM® **in Facial Masks**

Clay-based facial masks are designed principally to clean by absorbing dirt and oils, and to provide a tightening sensation by their contraction as they dry and harden. Kaolin clay and smectite clay (bentonite) are used to achieve these effects. Mechanical astringency and cleansing are provided primarily by the kaolin. Smectite clay contributes to these functions, while also stabilizing the liquid mask against syneresis. The smectite clay also acts like a plasticizer providing smooth and easy product application. The facial mask is also an ideal vehicle for therapeutic additives that can clean and treat the skin beyond the basic cleansing and toning properties of the clays.

As high purity, water-washed natural clays, **VEEGUM** Magnesium Aluminum Silicate products are the preferred smectite for facial masks. Depending on the specific performance requirements of the mask formulation, the following grades are recommended:

VEEGUM HS – In cosmetic or therapeutic facial masks, **VEEGUM HS** provides the stabilizing and plasticizing benefits of other high purity smectites, but its relatively low viscosity contribution allows it to be used at levels high enough to enhance skin cleansing. **VEEGUM HS** is Purified Bentonite N.F.

VEEGUM Ultra – In masks, as in all topicals, **VEEGUM Ultra** is unique among smectite clay products in providing pH 4.5 dispersions for optimum compatibility with the naturally acidic pH of the skin.

VEEGUM F – Clay masks are usually sold as thick pastes that can be dispensed from squeeze tubes or wide mouth jars. A convenient alternative form is a powder blend, which can be reconstituted as needed with a small amount of water or other liquids. **VEEGUM F** is an ultrafine powder perfectly suited for uniform dry blends.

HYDRATING VEEGUM PRODUCTS

VEEGUM products must be properly dispersed in water to achieve their best performance. No other materials, especially preservatives, should be present in the water, because they can interfere with proper 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 **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. It is the user's responsibility to determine the proper conditions and method in light of the user's unique operations.

<u>Water</u>	<u>Mixer Type</u>	<u>Mixer Speed, rpm</u>	Minimum Suggested Mixing Time	
			VEEGUM HS	VEEGUM Ultra
25°C	Homogenizer	3000	20 minutes	10 minutes
75°C	Homogenizer	3000	10 minutes	10 minutes
25°C	Propeller	800	30 minutes	15 minutes
75°C	Propeller	800	20 minutes	10 minutes

Purified Bentonite Refining Masks

	<u>No.</u> 481	<u>No.</u> 482
VEEGUM HS , Magnesium Aluminum Silicate	5.0%	5.0%
Water	42.5	40.0
Glycerin	4.0	4.0
Butylene Glycol	4.0	4.0
Cosmetic Kaolin Clay	30.0	25.0
Cosmetic Talc	5.0	5.0
Sodium Lauroyl Sarcosinate, 30% soln.	5.0	5.0
Hydrolyzed Oat Flour	1.0	1.0
Panthenol	1.0	1.0
Aloe vera	1.0	1.0
Fucogel 1000 ² , Biosaccharide Gum-1	0.5	0.5
Sodium PCA	1.0	1.0
Lactic Acid, USP, 88%	-	5.0
Sodium Lactate	-	2.5
Preservative	qs	qs

Procedure: Add the **VEEGUM HS** to the water slowly, agitating at maximum available shear. Mix until hydrated. Add the remaining ingredients in the order listed, mixing after each addition until smooth. The high viscosity of the **VEEGUM HS** dispersion and the finished mask requires preparation in equipment suitable for mixing thick consistency compositions.

Acid Smectite AHA Clay Masks

	<u>No.</u> 486	<u>No.</u> 487
VEEGUM Ultra , Magnesium Aluminum Silicate	5.0%	5.0%
Water	38.75	38.9
Glycerin	3.00	5.0
Butylene Glycol	3.00	3.0
Cosmetic Kaolin Clay	30.00	30.0
Cosmetic Talc	5.00	5.0
Sodium Lauroyl Sarcosinate, 30% soln.	5.00	5.0
Glycolic Acid, 70%	7.00	5.0
Panthenol	-	0.5
Tocopheryl Acetate	-	0.1
Retinyl Palmitate	-	0.1
Triethanolamine	3.25	2.4
Preservative	qs	qs

Procedure: Add the **VEEGUM Ultra** to the water slowly, agitating at maximum available shear. Mix until hydrated. Add the remaining ingredients in the order listed, mixing after each addition until smooth. The high viscosity of the **VEEGUM Ultra** dispersion and the finished mask requires preparation in equipment suitable for mixing thick consistency compositions.

Purified Bentonite Botanical Masks

	<u>No.</u> 520	<u>No.</u> 521
VEEGUM HS , Magnesium Aluminum Silicate	4.0%	4.0%
VANZAN® NF , Xanthan Gum	0.3	0.3
Water	43.7	43.7
Honey	20.0	-
Sucrose (powdered sugar)	-	15.0
Glycerin	10.0	10.0
Crodafos™ N3 Neutral ³ , DEA-Oleth-3-Phosphate	5.0	5.0
Phytelene® Complex EGX 246 ⁴ , Propylene Glycol (and) Water (and) Hops Extract (and) Rosemary Extract (and) Horsetail Extract (and) Pine Cone Extract (and) Lemon Extract	3.0	-
Phytelene Complex EGX 251 ⁴ , Propylene Glycol (and) Water (and) Mallow Extract (and) Ivy Extract (and) Cucumber Extract (and) Sambucus Nigra Extract (and) Arnica Montana Extract (and) Pellitory Extract	3.0	-
Phytelene Complex EGX 243 ⁴ , Propylene Glycol (and) Water (and) Grape Extract (and) Hypericum Perforatum Extract (and) Arnica Montana Extract (and) Witch Hazel Extract (and) Horse Chestnut Extract (and) Ivy Extract	-	3.0
Phytelene Complex EGX 244 ⁴ , Propylene Glycol (and) Water (and) Calendula Officinalis Extract (and) Chamomile Extract (and) Linden Extract (and) Cornflower Extract (and) Matricaria Extract (and) Hypericum Perforatum Extract	-	3.0
Cosmetic Italian Talc	10.0	-
Allantoin	1.0	1.0
Hydrolyzed Oat Flour	-	10.0
Zinc Oxide	-	5.0
Preservative	qs	qs

Procedure: Dry blend the **VEEGUM HS** and **VANZAN NF**; add to the water slowly, agitating at maximum available shear. Mix until hydrated. Add the remaining ingredients in the order listed, mixing after each addition until smooth. The high viscosity of the **VEEGUM HS/VANZAN NF** dispersion and the finished mask requires preparation in equipment suitable for mixing thick consistency compositions.

Peelable/Rinsable Face Mask

	<u>No.</u> 541
VEEGUM HS , Magnesium Aluminum Silicate	2%
Water	63
Cosmetic Kaolin Clay	10
Airvol® 523S ⁵ , Polyvinyl Alcohol	10
Butylene Glycol	10
Sodium Lauroyl Sarcosinate, 30% soln.	5
Preservative	q.s.

Procedure: Add the **VEEGUM HS** to the water slowly, agitating at maximum available shear. Mix until hydrated. Add the remaining ingredients in the order listed, mixing after each addition until smooth.

Instant Clay Treatment Masks

	<u>No. 495</u>	<u>No. 496</u>	<u>No. 497</u>	<u>No. 498</u>	<u>No. 542</u>
VEEGUM F , Magnesium Aluminum Silicate	5.0%	5.0%	5.0%	5.0%	5.0%
Cosmetic Kaolin Clay	53.0	45.0	50.0	38.6	67.0
Zinc Oxide or Calamine	30.0	20.0	25.0	20.0	20.0
PVP K-30 ⁶ , Polyvinylpyrrolidone	5.0	5.0	5.0	5.0	5.0
Crotein™ SPA ³ , Hydrolyzed Collagen	5.0	-	-	5.0	
Crotein SPO ³ , Hydrolyzed Collagen	-	-	5.0	-	
Hydrolyzed Oat flour	-	20.0	-	-	
Allantoin	2.0	-	2.0	-	2.0
Sucrose (powdered sugar)	-	5.0	-	15.0	
Colloidal Sulfur	-	-	5.0	4.0	
Phytelene Tomato EN 310 Powder ⁴ , Solanum Lycopersicum Extract	-	-	1.5	1.2	
Phytelene Cucumber EN 264 Powder ⁴ , Cucumis Sativus Fruit Extract	-	-	1.5	1.2	
Urea	-	-	-	5.0	
Green Tea Extract ⁸	-	-	-	-	1.0

Procedure: Dry blend thoroughly and package in a moisture-proof container

Directions for use: Measure one tablespoon of mask powder into a small clean container. Add water a few drops at a time with stirring, until a smooth, creamy paste is formed. The user can experiment with more exotic treatments by using milk, juices, egg, honey or witch hazel in place of water. Apply to face and allow to dry. Rinse off with clear water and a soft cloth or cotton ball. Discard unused paste. A larger quantity of paste can be prepared and stored under refrigeration if the manufacturer incorporates a suitable preservative in the powder blend.

Masks No. 495 and No. 496 are for normal to oily skin. Masks No. 497 and No. 498 are for oily skin and acne blemished skin. Mask No. 542 is for all skin types.

Creamy Clay Mask

	<u>No. 350</u>
VEEGUM , Magnesium Aluminum Silicate	4.5%
A VANZAN NF , Xanthan Gum	0.2
Water	73.8
Glycerin	4.0
Ritachol ^{®1} , Mineral Oil (and) Lanolin Alcohol	4.5
Syncrowax™ ³ , BB4 Synthetic Beeswax	1.0
B Cetyl Alcohol	0.5
Crodamol™ MM ³ , Myristyl Myristate	1.5
Arlacel [®] 40 ⁷ , Sorbitan Palmitate	0.5
Tween [®] 60 ⁷ , Polysorbate 60	0.5
Cosmetic Kaolin Clay	6.0
C Titanium Dioxide	3.0
Preservative	q.s

Procedure: Begin heating the water to 70-75°C. Dry blend the **VEEGUM** and **VANZAN NF**; add to the water slowly, mixing with maximum available shear until hydrated. Add the glycerin and maintain at 70-75°C. Mix 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 the Part C ingredients when the emulsion is < 35°C.

Suppliers:

¹R.I.T.A. Corporation, Crystal Lake, IL

²Barnet Products, Englewood Cliffs, NJ

³Croda, Inc., Parsippany, NJ

⁴Lipo Chemicals, Paterson, NJ

⁵Air Products and Chemicals, Allentown, PA

⁶ISP, Wayne, NJ

⁷Uniqema, New Castle, DE

⁸Greentech, Saint Beauzire, France

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