

No. 915rev

# VEEGUM® Magnesium Aluminum Silicate and VANATURAL® Bentonite Clay 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 mask against syneresis and plasticizing it for smooth and easy 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** and **VANATURAL** products are the preferred smectites for facial masks. The following grades are recommended, depending upon the specific performance requirements of the mask formulation:

**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 NF.

**VANATURAL MC** – Rapidly hydrating, water-washed bentonite clay - a pure and natural suspension stabilizer and rheology modifier for facial masks. Microbiology controlled.

**VANATURAL** - Rapidly hydrating, water-washed bentonite clay - a pure and natural suspension stabilizer and rheology modifier for facial masks. **VANATURAL** is the ECOCERT and COSMOS listed version of **VANATURAL MC**.

**VEEGUM** *Ultra* – In masks, as in all topicals, **VEEGUM** *Ultra* provides pH 4.5 dispersions for optimum compatibility with the naturally acidic pH of the skin.

**VEEGUM EZ** – A direct offset for **VEEGUM** *Ultra* but does not contain titanium dioxide.

# TABLE OF CONTENTS

| Bentonite & Kaolin Peel-off Mask No. 661   | 1  |
|--------------------------------------------|----|
| Instant Charcoal Mask No. 657              | 2  |
| Rich & Nourishing Green Silt Mask No. 643  | 3  |
| Green Tea Instant Face Mask No. 649        | 4  |
| Collagen Instant Clay Mask No. 648         | 5  |
| Oat Instant Clay Mask No. 650              | 6  |
| Aloe & Oat Instant Mask No. 651            | 7  |
| Instant Sulfur Acne Treatment Mask No. 590 | 8  |
| AHA Clay Mask No. 486                      | 9  |
| Purified Bentonite Refining Mask No. 481   | 10 |
| Purified Bentonite Botanical Mask No. 520  | 11 |
| Purified Bentonite Botanical Mask No. 521  | 12 |

# Bentonite & Kaolin Peel-off Mask No. 661

| Α | Water Polyvinyl Alcohol (Selvol® Ultalux FF¹)                                                                                 | <b>Wt.%</b> 54.40 12.00 |
|---|-------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| В | VANATURAL® MC Bentonite Clay<br>Water                                                                                         | 2.50<br>15.10           |
|   | Propanediol (Zemea® Propanediol²) Hydrolyzed Oat Protein (and) Glycerin (and) Phenoxyethanol (and) Water (Tech-O® #6-055 LC³) | 5.00<br>5.00            |
| С | Disodium EDTA                                                                                                                 | 0.10                    |
|   | Aloe Barbadensis Leaf Juice (ACTIValoe® Aloe Vera Gel Qmatrix® QM 200x (Powder)4)                                             | 0.90                    |
|   | Colloidal Kaolin USP/BC (Colloidal Kaolin – USP/BC 2457 <sup>5</sup> )                                                        | 5.00                    |
| _ | l n                                                                                                                           |                         |
| ט | Preservative                                                                                                                  | q.s.                    |

**Procedure:** Prepare Parts A, B and C separately using a propeller mixer fitted with the mixing blades for each as indicated. Sift the Polyvinyl Alcohol in Part A into ~25°C water under mixing with a propeller blade. Slowly heat while mixing to 85°C ± 3°C. Once the Polyvinyl Alcohol has dissolved, remove Part A from heat, and allow to cool with mixing. Once cooled to ~50°C, switch to a paddle blade or other means of gentle mixing and continue mixing to ~35°C. De-aerate the solution. Prepare Part B in a separate container. Slowly add the **VANATURAL**® **MC** to the water while agitating at maximum available shear with a prop blade. Mix until fully hydrated. Also, prepare Part C in a separate container. Using a dispersing blade, mix together the propanediol and Tech-O #6-055 LC and then dissolve the Disodium EDTA and slurry the aloe vera gel 200x. Then, add the kaolin clay while mixing and disperse thoroughly. In the final batch preparation, use the lowest shear and speed possible in order to achieve adequate mixing while controlling the incorporation of air, such as a propeller mixer fitted with a paddle blade. Transfer Part B to the final batch vessel and then under mixing add Part C until thoroughly combined. Continue mixing, then add Part A in small increments and mix completely after each. Lastly, add the preservative, Part D while mixing until fully incorporated.

## **RAW MATERIAL SUPPLIERS**

<sup>1</sup>Sekisui Specialty Chemicals America, LLC, Dallas, TX <sup>2</sup>DuPont Tate & Lyle Bio Products Company, LLC, Wilmington, DE

### **TRADEMARKS**

VANATURAL is a registered trademark of Vanderbilt Minerals, LLC.
ACTIValoe and Qmatrix are registered trademarks of Aloecorp, Inc.
Selvol is a registered trademark of Sekisui Specialty Chemicals America, LLC.
Tech-O is a registered trademark of Beacon CMP Corporation.
Zemea is a registered trademark of DuPont Tate & Lyle Bio Products Company, LLC.

Rev. 01/14/21

<sup>&</sup>lt;sup>3</sup>Beacon CMP Corp., Kenilworth, NJ

<sup>&</sup>lt;sup>4</sup>Aloecorp, Inc., Lyford, TX

<sup>&</sup>lt;sup>5</sup>Brenntag Specialties, Inc., South Plainfield, NJ



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# **Instant Charcoal Mask No. 657**

|                                                                                    | <b>VV</b> 1.70 |
|------------------------------------------------------------------------------------|----------------|
| VANATURAL® or VANATURAL MC Bentonite Clay                                          | 5.0            |
| Sodium Cocoyl Isethionate (Jordapon® SCI Powder¹)                                  | 40.0           |
| Sodium Lauroyl Sarcosinate (SP Crodasinic™ LS95NT MBAL-PW-(RB)²)                   | 1.0            |
| Colloidal Kaolin USP/BC (Colloidal Kaolin USP/BC 24573)                            | 34.0           |
| Charcoal Powder (SpecKare™ BCP02 Bamboo Charcoal Powder (200 mesh) <sup>4</sup> )* | 20.0           |

Procedure: Mix powders until uniformly blended.

**Directions for use:** Transfer a small amount of the powder to a separate container. While slowly adding water dropwise, stir to form a paste of the desired consistency. Apply the mask to the face and allow it to dry. Rinse off with water using gentle rubbing.

### RAW MATERIAL SUPPLIERS

<sup>1</sup>BASF Corp., Florham Park, NJ <sup>2</sup>Croda, Inc., Edison, NJ <sup>3</sup>Brenntag Specialties, Inc., South Plainfield, NJ <sup>4</sup>Spec-Chem Industry, Inc., Nanging 211800, P.R. China

### **TRADEMARKS**

VANATURAL is a registered trademark of Vanderbilt Minerals, LLC. AccessCOAL is a trademark of Access Ingredients. Crodasinic is a trademark of Croda, Inc. Jordapon is a registered trademark of BASF Corporation. SpecKare is a trademark of Spec-Chem Industry, Inc.

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<sup>\*</sup> Note: SpecKare BCP02 Bamboo Charcoal Powder (200 mesh) is available in the US as: AccessCOAL™ D50-3.4 from Access Ingredients, South Pasadena, CA

# Rich & Nourishing Green Silt Mask No. 643

|   |                                                                                                                      | Wt.%  |
|---|----------------------------------------------------------------------------------------------------------------------|-------|
|   | VANATURAL® or VANATURAL MC Bentonite Clay                                                                            | 3.50  |
|   | VANZAN® NF Xanthan Gum                                                                                               | 0.65  |
| Α | Water                                                                                                                | 50.85 |
| ^ | Hydrolyzed Oat Protein (and) Glycerin (and) Phenoxyethanol (and) Water (Tech-O <sup>®</sup> #6-055 LC <sup>1</sup> ) | 5.00  |
|   | Propanediol (Zemea® propandiol²)                                                                                     | 5.00  |
|   | 7 M (O) Ot (D                                                                                                        | 00.00 |
| В | Zea Mays (Corn) Starch (Purity 21C Pure <sup>TM3</sup> ) Silt (Liposilt® Green PF <sup>4</sup> )                     | 20.00 |
|   | Siit (Liposiit® Green PF*)                                                                                           | 10.00 |
| С | Preservative                                                                                                         | q.s.  |
|   |                                                                                                                      | 4.5.  |
| D | Aqua (and) Sodium Lauroyl Sarcosinate (Crodasinic <sup>™</sup> LS 30 NT-LQ-(RB) <sup>5</sup> )                       | 5.00  |

**Procedure:** 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. Then, add the rest of the Part A ingredients and mix in. Slowly add the corn starch and mix in thoroughly. Refer to the manufacturer's specific recommendations for incorporating the silt. If necessary, cool the batch with mixing to below ~40°C before adding the silt. Then, add in the silt and mix in completely by homogenization or high-shear mixing while maintaining the batch temperature below 50°C. With low shear mixing, cool the batch to <30°C, then add the preservative and mix in completely. If necessary, reduce the mixing speed to avoid air entrapment. Then, add Part D and mix in completely.

### **RAW MATERIAL SUPPLIERS**

<sup>1</sup>Beacon CMP Corp., Kenilworth, NJ
<sup>2</sup>DuPont Tate & Lyle Bio Products Company, LLC, Wilmington, DE
<sup>3</sup>AkzoNobel Surface Chemistry, LLC, Chicago, IL
<sup>4</sup>Vantage Specialty Ingredients (formerly Lipo Chemicals), Warren, NJ
<sup>5</sup>Croda Inc., Edison, NJ

### **TRADEMARKS**

VANATURAL and VANZAN are registered trademarks of Vanderbilt Minerals, LLC. Crodasinic is a trademark of Croda, Inc.
Liposilt is a registered trademark of Vantage Specialty Ingredients, Inc.
Purity 21C Pure is a trademark of AkzoNobel Surface Chemistry, LLC.
Tech-O is a registered trademark of Beacon CMP Corporation.
Zemea is a registered trademark of DuPont Tate & Lyle Bio Products Company, LLC.

Rev01/05/2018

# PROTOTYPE FORMULA

# Green Tea Instant Face Mask No. 649

|                                                              | Wt.% |
|--------------------------------------------------------------|------|
| VANATURAL® or VANATURAL MC Bentonite Clay                    | 5    |
| Kaolin Clay, Cosmetic Grade                                  | 67   |
| Zinc Oxide or Calamine, USP                                  | 20   |
| Polyvinylpyrrolidone (PVP K-30 <sup>1</sup> )                | 5    |
| Allantoin                                                    | 2    |
| Camellia Sinensis Leaf Extract (PE, Green Tea <sup>2</sup> ) | 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**

### **TRADEMARKS**

<sup>1</sup>Ashland Specialty Ingredients, Wilmington, DE <sup>2</sup>Bio-Botanica, Inc., Hauppauge, NY

VANATURAL is a registered trademark of Vanderbilt Minerals, LLC.



# Collagen Instant Clay Mask No. 648

|                                               | Wt.% |
|-----------------------------------------------|------|
| VANATURAL® or VANATURAL MC Bentonite Clay     | 5    |
| Kaolin Clay, Cosmetic Grade                   | 53   |
| Zinc Oxide or Calamine, USP                   | 30   |
| Polyvinylpyrrolidone (PVP K-30 <sup>1</sup> ) | 5    |
| Hydrolyzed Collagen (Crotein™ A-PW-(WD)²)     | 5    |
| Allantoin                                     | 2    |

Procedure: Mix powders until uniformly blended.

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

### **RAW MATERIAL SUPPLIERS**

# <sup>1</sup>Ashland Specialty Ingredients, Wilmington, DE <sup>2</sup>Croda, Inc., Edison, NJ

### **TRADEMARKS**

**VANATURAL** is a registered trademark of Vanderbilt Minerals, LLC. Crotein is a trademark of Croda, Inc.



# Oat Instant Clay Mask No. 650

|                                                              | Wt.% |
|--------------------------------------------------------------|------|
| VANATURAL® or VANATURAL MC Bentonite Clay                    | 5    |
| Kaolin Clay, Cosmetic Grade                                  | 45   |
| Zinc Oxide or Calamine, USP                                  | 20   |
| Polyvinylpyrrolidone (PVP K-30 <sup>1</sup> )                | 5    |
| Avena Sativa (Oat) Kernel Flour (Tech-O® #11-070 Oat Flour²) | 20   |
| Polydextrose or Sucrose (Powdered Sugar)                     | 5    |

Procedure: Mix powders until uniformly blended.

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

### **RAW MATERIAL SUPPLIERS**

# <sup>1</sup>Ashland Specialty Ingredients, Wilmington, DE <sup>2</sup>Beacon CMP Corporation, Kenilworth, NJ

### **TRADEMARKS**

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



### Aloe & Oat Instant Mask No. 651

|                                                                                       | Wt.% |
|---------------------------------------------------------------------------------------|------|
| VANATURAL® or VANATURAL MC Bentonite Clay                                             | 5    |
| Kaolin USP                                                                            | 89   |
| Aloe Barbadensis Leaf Juice (and) Maltodextrin (Terra-Spray <sup>™</sup> Spray        | 1    |
| Dried Aloe Vera Powder 100X1)                                                         |      |
| Avena Sativa (Oat) Kernel Flour (Tech-O <sup>®</sup> #11-070 Oat Flour <sup>2</sup> ) | 5    |

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**

<sup>1</sup>Terry Laboratories, Melbourne, FL <sup>2</sup>Beacon CMP Corporation, Kenilworth, NJ

### **TRADEMARKS**

**VANATURAL** 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.



# PROTOTYPE FORMULA

# 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 Flour1) | 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**

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

### **TRADEMARKS**

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

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# AHA Clay Mask No. 486

| A | VEEGUM® Ultra or VEEGUM EZ Magnesium Aluminum Silicate Water                                | <b>Wt.%</b> 5.00 38.25                |
|---|---------------------------------------------------------------------------------------------|---------------------------------------|
| В | Glycerin Butylene Glycol Cosmetic Kaolin Clay Cosmetic Talc Sodium Lauroyl Sarcosinate, 30% | 3.00<br>3.00<br>30.00<br>5.00<br>5.00 |
| С | Glycolic Acid, 70%                                                                          | 7.00                                  |
| D | Triethanolamine Citric Acid (to pH 4.0 ± 0.2)                                               | 3.75<br>q.s.                          |
| Ε | Preservative, Fragrance                                                                     | q.s.                                  |

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

## TRADEMARKS

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

Rev01/25/2021

# Purified Bentonite Refining Mask No. 481

|   |                                                                                       | Wt.% |
|---|---------------------------------------------------------------------------------------|------|
|   | VEEGUM® HS Magnesium Aluminum Silicate (Purified Bentonite NF)                        | 5.0  |
| Α | Water                                                                                 | 42.5 |
|   | Glycerin                                                                              | 4.0  |
|   | Butylene Glycol                                                                       | 4.0  |
|   | Kaolin Clay, Cosmetic Grade                                                           | 30.0 |
|   | Talc, Cosmetic Grade                                                                  | 5.0  |
|   | Sodium Lauroyl Sarcosinate, 30%                                                       | 5.0  |
| В | Avena Sativa (Oat) Kernel Flour (Tech-O <sup>®</sup> #11-070 Oat Flour <sup>1</sup> ) | 1.0  |
|   | d-Panthenol                                                                           | 1.0  |
|   | Aloe Barbadensis Leaf Juice (Aloe Vera Gel Regular 40X-AG046 <sup>2</sup> )           | 1.0  |
|   | Biosaccharide Gum-1 (Fucogel® 1000³)                                                  | 0.5  |
|   | Sodium PCA                                                                            | 1.0  |
|   | Preservative                                                                          | q.s. |

**Procedure:** Slowly add the **VEEGUM® HS** 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.

### **RAW MATERIAL SUPPLIERS**

<sup>1</sup>Beacon CMP Corporation, Kenilworth, NJ <sup>2</sup>Terry Laboratories, Melbourne, FL <sup>3</sup>Solabia USA, New York, NY

### **TRADEMARKS**

**VEEGUM** is a registered trademark of Vanderbilt Minerals, LLC. Tech-O is a registered trademark of Beacon CMP Corporation. Fucogel is a registered trademark of Societe la Biochimie Appliquee.

Rev06/03/2016

## Purified Bentonite Botanical Mask No. 520

|   |                                                                                                             | Wt.% |
|---|-------------------------------------------------------------------------------------------------------------|------|
|   | VEEGUM® HS Magnesium Aluminum Silicate (Purified Bentonite NF)                                              | 4.0  |
| Α | VANZAN® NF Xanthan Gum                                                                                      | 0.3  |
|   | Water                                                                                                       | 43.7 |
|   | Honey                                                                                                       | 20.0 |
|   | Glycerin                                                                                                    | 10.0 |
|   | DÉA-oleth-3-phosphate (Crodafos™ N3 Neutral¹)                                                               | 5.0  |
|   | Butylene Glycol, Water, Humulus Lupulus (Hops) Cone Extract, Rosmarinus                                     | 3.0  |
|   | Officinalis (Rosemary) Leaf Extract, Equisetum Arvense Extract, Pinus Sylvestris                            |      |
|   | Cone Extract, Citrus Medica Limonum (Lemon) Fruit Extract (Phytelenes® Complex                              |      |
| В | EGX 246 BG <sup>2</sup> )                                                                                   |      |
| _ | Butylene Glycol, Water, Malva Sylvestris (Mallow) Flower Extract, Hedera Helix                              | 3.0  |
|   | (Ivy) Extract, Parietaria Officinalis Extract, Cucumis Sativus (Cucumber) Fruit                             |      |
|   | Extract, Sambucus Nigra Extract, Arnica Montana Flour Extract (Phytelenes Complex EGX 251 BG <sup>2</sup> ) |      |
|   | Talc. Cosmetic Grade                                                                                        | 10.0 |
|   | Allantoin                                                                                                   | 1.0  |
|   | Preservative                                                                                                |      |
|   | 1 10301 Valivo                                                                                              | q.s. |

**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 the Part B ingredients in the order listed, mixing after each addition until smooth.

# **RAW MATERIAL SUPPLIERS**

<sup>1</sup>Croda Inc., Edison, NJ <sup>2</sup>Greentech USA, Inc., Yarmouth, ME

### **TRADEMARKS**

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Phytelenes is a registered trademark of Greentech Société Anonyme.

Rev06/06/2016

# Purified Bentonite Botanical Mask No. 521

|   |                                                                                   | Wt.% |
|---|-----------------------------------------------------------------------------------|------|
| A | VEEGUM® HS Magnesium Aluminum Silicate (Purified Bentonite NF)                    | 4.0  |
|   | VANZAN® NF Xanthan Gum                                                            | 0.3  |
|   | Water                                                                             | 43.7 |
| В | Sucrose (Powdered Sugar)                                                          | 15.0 |
|   | Glycerin                                                                          | 10.0 |
|   | DEA-oleth-3-phosphate (Crodafos™ N3 Neutral¹)                                     | 5.0  |
|   | Butylene Glycol, Water, Vitis Vinifera (Grape) Leaf Extract, Hypericum Perforatum | 3.0  |
|   | Extract, Arnica Montana Flower Extract, Hamamelis Virginiana (Witch Hazel) Leaf   |      |
|   | Extract, Aesculus Hippocastanum Leaf (Horse Chestnut) Extract, Hedera Helix       |      |
|   | (Ivy) Extract (Phytelenes® Complex EGX 243 BG²)                                   |      |
|   | Butylene Glycol, Water, Hypericum Perforatum Extract, Calendula Officinalis       | 3.0  |
|   | Flower Extract, Anthemis Nobilis Flower Extract, Tilia Cordata Flower Extract,    |      |
|   | Centaurea Cyanus Flower Extract, Chamomilla Recutita (Matricaria) Flower Extract  |      |
|   | (Phytelenes® Complex EGX 244 BG²)                                                 |      |
|   | Allantoin                                                                         | 1.0  |
|   | Avena Sativa (Oat) Kernel Flour (Tech-O® #11-070 Oat Flour³)                      | 10.0 |
|   | Zinc Oxide                                                                        | 5.0  |
|   | Preservative                                                                      | q.s. |

**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 the Part B ingredients in the order listed, mixing after each addition until smooth.

# **RAW MATERIAL SUPPLIERS**

<sup>1</sup>Croda Inc., Edison, NJ <sup>2</sup>Greentech USA, Inc., Yarmouth, ME <sup>3</sup>Beacon CMP Corporation, Kenilworth, NJ

### **TRADEMARKS**

**VEEGUM** and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC. Crodafos is a trademark of Croda, Inc.

Phytelenes is a registered trademark of Greentech Société Anonyme.

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

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