

Starter Formulations

More than 40 GlyAcid® Formulation Ideas to Jump Start your Unique Hair, Skin and Nail Care Products





PURE CHEMISTRY

For more than 45 years, glycolic acid has been predominantly produced by either the carbonylation of formaldehyde or with glycolonitrile as a starting material. Most formulators would prefer an alternative choice. CrossChem's GlyAcid® is a next-generation, high purity glycolic acid produced with a proprietary acid saponification and purification process. GlyAcid® does not use formaldehyde while delivering a high purity alpha hydroxy acid in 57% solution, 70% solution and 99% crystalline.

GLYACID® FORMULATION IDEAS

Glycolic acid use in personal care formulations continues to grow globally as a proven anti-aging ingredient. Increasing research and understanding of glycolic acid as an effective cross-linker of damaged hydrogen bonds in keratin demonstrates an exciting opportunity within hair care.

In cooperation with our distribution partners in the USA, Europe and Asia, CrossChem is providing over 40 GlyAcid® starting formulas to assist with your own unique hair, skin and nail care products.

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PRETTY-IN-PLACE HAIR GLUE

This high-powered formulation is serious about keeping hair in place without leaving the crunch of hair gel. The product adheres to the hair for a smooth, conditioning effect. **Endicare® DP-530S** forms an immediate film without compromising shine or feel. **GlyAcid®** helps improve the appearance of hair growth and manageability.

PHASE A	INCI Name	% (w/w)
Deionized Water	Aqua	66.47
Endicare® DP-530S1	Polyethyloxazoline	10.00
GlyAcid® 70 HP ^{1,2}	Glycolic Acid	2.00
Conditioner P7NA ^{1,3}	Polyquaternium-7	4.50
DL-Panthenol 50%	Panthenol	1.00
PHASE B		
Moringa Seed Oil ^{1,4}	Moringa Oleifera Seed Oil	2.00
Jojoba Oil ¹	Simmondsia Chinesis (Jojoba) Seed Oil	2.00
Endimate®IPP1	Isopropyl Palmitate	3.00
Endimate®IPM ¹	Isopropyl Myristate	2.00
Endicare CT IPP ¹	Cetearyl Alcohol (and) Centrimonium Bromide	6.00
PHASE C		
Sharomix HMG ^{1,5}	Sodium Hydroxymethyl Glycinate	0.80
PHASE D		
NaOH 0.5 N	Sodium Hydroxide	0.23

Procedure

Phase A: Add Phase A in order to main vessel under shear mixing and begin heating to 167-176° F (75-80°C). **Phase B**: Add Phase B to separate vessel under shear mixing and heat to 167-176° F (75-80°C). Once uniform and to temperature, add to main vessel under shear mixing. Begin cool down. **Phase C**: Once at 104-113° F (40-45°C), add Phase C to Phase AB under shear mixing. **Phase D**: Add Phase D to Phase ABC under shear mixing for pH. QS Phase D to desired pH. Once uniform, transfer to final container.

Suppliers

¹Coast Southwest, Inc., ²CrossChem, ³3V, ⁴Vivimed Labs USA, ⁵Sharon Laboratories, Ltd.

Properties

pH: 3.70 to 4.50

Viscosity: spindle 4 at 30.0 rpm = 3,000.0-6,000.0 cst.

Formulation provided by:



HOLD YOUR HAIR FROM HERE TO THERE TO EVERYWHERE

This flexible styling hair gel containing Endicare® DP-530S provides extra-firm holding power for use on wet or dry hair, while allowing versatility in styling for control. Enriched with Green Tea, this flake-free gel builds body and shine, while GlyAcid® improves the protection and manageability of hair by maintaining moisture and preventing breakage. The formula conditions the hair without sacrificing maximum hold.

PHASE A	INCI Name	% (w/w)
Deionized Water	Aqua	61.60
Synthalen® W-2000 ^{1,2}	Acrylates/Palmeth-25 (and) Acrylate Copolymer	9.00
Dissolvine® 100-S ^{1,3}	Tetrasodium EDTA	0.10
DL-Panthenol 50%1	Panthenol	0.50
Glycerin ¹	Glycerin	1.50
Propylene Glycol ¹	Propylene Glycol	2.00
Endicare® DP-530S1	Polyethyloxazoline	17.00
Endisil® FS-1931	PEG-12 Dimethicone	3.00
PHASE B		
GlyAcid® 70 HP1.4	Glycolic Acid	2.00
NaOH (40% aq.)	Sodium Hydroxide	1.20
PHASE C		
Conditioner P7NA ^{1,2}	Polyquaternium-7	0.10
Green Tea Concentrate ^{1,5}	Water (and) Camellia Sinensis (Green Tea)	1.00
Sharomix CPA ^{1,2}	Phenethyl Alcohol (and) Capryl Glycol	1.00

Procedure

Phase A: Combine Phase A in formula order while mixing with propeller agitator until fully uniform. Phase B: In a separate vessel, combine Phase B in formula order while continuously mixing and add to Phase A. Mix until well-blended and evenly dispersed. Phase C: Add Phase C in formula order to batch AB while continuously mixing. Transfer into final container once uniform.

Suppliers

¹Coast Southwest, Inc., ²3V Inc., ³AkzoNobel Functional Chemicals LLC, ⁴CrossChem, ⁵Tea Guys, ⁶Sharon Laboratories Ltd.

Properties

pH: 6-6.5

Viscosity: spindle 4 at 6.0 rpm = 20,000 - 25,000 cst.

Formulation provided by:



GLYCOLIC ACID SHAMPOO CSW

This moisturizing shampoo offers the benefits of glycolic acid, enhancing the protection and manageability of hair and making hair easier to style.

PHASE A	INCI Name	% (w/w)
Deionized Water	Aqua	61.95
Glycerin 99.7% USP Kosher ¹	Glycerin	4.00
Dissolvine® GL-47-\$1,2	Tetrasodium Glutamate Diacetate	0.20
Sorbitol 70%	Sorbitol	4.00
Synthalen® W400 ^{1,3}	Acrylates Copolymer	10.00
PHASE B		
Endinol® MILD SFB-105K ¹	Disodium Laureth Sulfosuccinate (and) Sodium Cocoyl Isethionate (and) Cocamidopropyl Betaine	10.00
Endicare® LI-71	PEG-7 Glyceryl Cocoate	5.00
PHASE C		
GlyAcid 70 HP ^{1,4}	Glycolic Acid	1.40
Sodium Hydroxide (0.5M)	Sodium Hydroxide	2.00
PHASE D		
Sharon 702 ^{1.5}	(Dehydroacetic Acid (and) Benzoic Acid (and) Phenoxyethanol)	1.00
PHASE E		
Endimox [™] CAW ¹	Cocamidopropylamine Oxide	0.25
Fragrance		0.20

Procedure

Phase A: In main vessel, add Phase A. Mix until uniform. Phase B: Add Phase B to Phase A. Phase C: In side vessel, combine Phase C, then add slowly to Phase AB. Phase D: Add preservative to Phase ABC. Intially the batch will be discontinuous. Continue mixing. Phase E: Slowly add the surfactant to Phase ABCD. The batch will become uniform and increase in viscosity. Add fragrance.

Suppliers

¹Coast Southwest, Inc., ²Akzo Nobel Functional Chemicals LLC, ³3V Sigma-USA, ⁴CrossChem, ⁵Sharon Laboratories Ltd.

Properties

pH: 6.83

Viscosity: spindle 5 @ 20 rpm = 8,100 cst.

Formulation provided by:



EASE WITHOUT GREASE BEARD FLUID

This beard fluid is absorbed quickly by the hair and skin while not feeling greasy thanks to **BergaCare FG 5**. **BergaSom Sun 75 H** and **BergaCare SB** provide care and protection, while **GlyAcid® 70 HP** reorders the hair cuticle leading to a more glossy and radiant appearance.

PHASE A	INCI Name	% (w/w)
Demineralized Water	Aqua	≤ 100.00
BergaSom Sun 75 H	Hydrogenated Lecithin	0.50
Butylene Glycol	Butylene Glycol	2.00
Allantoin	Allantoin	0.10
PHASE B		
BergaCare EM-AB ¹	C12-15 Alkyl Benzoate	2.00
BergaCare FG 5 ¹	Ethylhexyl Palmitate (and) Ethylhexyl Stearate (and) Hydrogenated Olive Oil Unsaponifiables (and) Caprylic Capric Triglyceride	5.00
BergaCare SB ¹	Butyrospermum Parkii (Shea) Butter	2.00
Agenaflo 9050 ²	Corn Starch Modified	2.00
Apricot Kernel Oil	Prunus Armeniaca (Apricot) Kernel Oil	2.00
Glyceryl Stearate Citrate	Glyceryl Stearate Citrate	1.00
Jojoba Oil	Simmondsia Chinensis (Jojoba) Seed Oil	1.00
PHASE C		
D-Panthenol	Panthenol	1.00
PHASE D		
GlyAcid® 70 HP3	Glycolic Acid (and) Water	2.50
Demineralized Water	Aqua	5.00
PHASE E		
NaOH	Sodium Hydroxide	Adjust pH
Preservative/Fragrance	-	q.s.

Procedure

Weigh water and Butylene Glycol, start stirring and add BergaSom Sun 75 H and Allantoin. Weigh **Phase B**, heat both phases up to ~70°C. Add **Phase B to A** while stirring and homogenize 30 seconds and add Panthenol. Mix GlyAcid® with water and add slowly under mixing, adjust pH and preserve.

Suppliers

¹Berg + Schmidt, ²Agrana, ³CrossChem distributed by Berg + Schmidt

Properties

pH: 4

Viscosity: (24H) 1430

Internal Ref: Beard Fluid-002-BSC

Formulation provided by:



CREATE AND SHAPE HAIR CREAM

Create and shape great hair looks with this curl enhancer or styling cream, which leaves a natural and fresh look for hair styling without the crunch and weighted down appearance.

PHASE A	INCI NAME	% (w/w)
Deionized Water	Aqua	58.60
Dissolvine® GL-47-S	Tetrasodium Glutamate Diacetate	0.30
GlyAcid® 70HP ^{1,2}	Glycolic Acid (and) Aqua	1.50
Olivatis™ 15¹.3	Olive Oil Glycereth-8 Esters	1.50
Endicare® DP-530\$1	Polyethyloxazoline	8.00
PHASE B		
Endimate® 33V1	Capric/Caprylic Triglyceride	5.00
Moringa Seed Oil ^{1,4}	Moringa Oleifera (Moringa) Seed Oil	2.00
Endicare® CT-1001	Cetearyl Alcohol (and) Cetrimonium Bromide	3.00
Palmitic Acid ¹	Palmitic Acid	6.00
Olivatis™ 18¹.3	Olive Oil Polyglyceryl-6 Esters (and) Sodium Stearoyl Lactylate (and) Cetearyl Alcohol	2.00
Olivatis [™] 19 ^{1,3}	Olive Oil Polyglyceryl-6 Esters (and) Phospholipids	1.00
Stearic Acid ¹	Stearic Acid	4.00
Myristic Acid ¹	Myristic Acid	3.00
Endimulse® C\$20-D1	Cetyl Stearyl Alcohol (and) Ceteareth-20	3.50
PHASE C		
Sharomix HMG ^{1,5}	Sodium Hydroxymethyl Glycinate	0.60
PHASE D		
NaOH 0.5N	Sodium Hydroxide	q.s.

Procedure

Phase A: Add Phase A to main vessel under shear mixing and heat to 167°F to 176°F (75°C to 80°C). Phase B: Add Phase B in separate vessel under shear mixing and heat to 167°F to 176°F (75°C to 80°C). Once both vessels are at temperature, add Phase B to main vessel slowly under high shear. Begin cool down. Phase C: Add Phase C to Phase AB under continued shear mixing when main vessel has cooled to 104°F to 113°F (40°C to 45°C). Phase D: QS Phase D into Phase ABC under shear mixing to desired pH between the range of 5.5 to 6.1. Once Phase ABCD has cooled below 86°F (30°C), transfer to final container.

Suppliers

¹Coast Southwest, Inc., ²CrossChem, ³Medolla Limited, ⁴ICSC International Cosmetic Science Centre, ⁵Sharon Laboratories, Ltd.

Properties

pH: 5.5 - 6.1

Viscosity: spindle 5.0 @ 5.0 rpm = 65,000 - 75,000 cst.

Formulation provided by:



GENTLE TOUCH GLYCOLIC ACID SHAMPOO

This shampoo with **GlyAcid® 70 HP**, the global standard in high-purity glycolic acid, helps remove oil and residue from hair and scalp. Exfoliation encourages better, healthier hair. Gentle surfactants provide loose-to-dense foam and cleansing without stripping or excessively drying out hair or scalp.

PHASE A	INCI Name	% (w/w)
Deionized Water	Aqua	48.70
Glycerin ¹	Glycerin	4.00
Endiquest® GLDA¹	Tetrasodium Glutamate Diacetate	0.20
Synthalen® W2000 ^{1,2}	Acrylates/Palmeth-25 Acrylates Copolymer	5.00
PHASE B		
DI Water	Aqua	48.70
GlyAcid® 70 HP1.3	Glycolic Acid (and) Water	2.5
NaOH 30% aq w/w	Sodium Hydroxide	qs
PHASE C		
Endinol® MILD B-Q18 ¹	Decyl Glucoside (and) Cocamidopropyl Hydroxysul- taine (and) Cocoamidopropyl Betaine (and) Co- camide MIPA (and) Disodium Laureth Sulfosuccinate (and) Disodium Lauryl Sulfosuccinate	20.00
GlucoTain® Clear¹	Capryloyl/Caproyl Methyl Clucamide	5.00
Endinol® B-MEVK ¹	Sodium Laureth Sulfate (and) Cocamide MEA (and) Cocoamidopropyl Betaine	5.00
PHASE D		
NaOH 30% aq w/w	Sodium Hydroxide	qs
PHASE E		
Sharomix® Amplify AM-241,4	Caprylyl Glycol (and) Methylpropanediol (and) Didecyldimonium Chloride (and) Polyquaternium-80	0.50

Procedure

Phase A: In main vessel, ad and mix phase A until uniform. Phase B: Mix phase B in separate vessel and adjust pH to 4.2 using sodium hydroxide. Phase B temperature will increase. Allow phase B to cool to room temperature. Add phase B to phase A. Phase C: In a separate vessel, mix phase C until uniform then add to phase AB with slow mixing. Phase D: Add phase D slowly to phase ABC until the pH reaches 5.5 to 6.0. As phase D is added to phase ABC, the mixture will thicken and become more transparent. Phase E: Add phase E, mix slowly. Transfer to holding vessel.

Suppliers

¹Coast Southwest, Inc., ²3V Sigma-USA, ³CrossChem LP, ⁴Sharon Laboratories Ltd.

Properties

pH: 5.5 to 6.5

viscosity: Spindle 3 @ 5 rpm = 15,000 to 20,000 cst

Internal Ref: CSW 005-97

Formulation provided by:



REPLENISHING SHAMPOO FOR STRESSED HAIR

This shampoo helps your hair recover from environmental stress as **GlyAcid® 70HP** repairs the hair cortex while smoothing the hair surface for easier combing and increased protection from moisture pick-up.

PHASE A	INCI Name	% (w/w)
Demineralized Water	Aqua	≤ 100.00
EDTA	Tetrasodium EDTA	0.10
Acrylodimethyltaurate/VP Copolymer	Acrylodimethyltaurate/VP Copolymer	1.00
Glycerin 99.5%	Glycerin	5.00
PHASE B		
BergaSoft SCI 801	Sodium Cocyl Isethionate	10.00
BergaCare Pearl 2 ¹	Glycol Distearate	2.00
Cocamide DEA	Cocamide DEA	2.00
PHASE C		
BergaCare EM-HE71	PEG-7 Glyceryl Cocoate	3.00
Laureth-4	Laureth-4	2.00
Cocamidopropyl Betaine 30%	Cocamidopropyl Betaine	6.00
PHASE D		
GlyAcid® 70 HP²	Glycolic Acid (and) Aqua	2.50
NaOH 25%	Sodium Hydroxide	Adjust pH ~4
PHASE E		
Preservative/Fragrance	-	q.s.

Procedure

Phase A: Weigh water, glycerin and add copolymer and EDTA while stirring until homogeneous. Phase B: Add all raw materials and heat up to 75 °C. Phase C: Add raw material and cool to 40 °C. Phase D: Add GlyAcid® while stirring. Phase E: Adjust pH and preservative.

Suppliers

¹Berg + Schmidt, ²CrossChem distributed by Berg + Schmidt

Properties

Note: For optimal effectiveness of GlyAcid®, we recommend working with a pH between 3.8 and 4.3

pH: 4

viscosity: (24H) = na Internal Ref: Gly Sh-007-BSC

Formulation provided by:



FIRST AID SHAMPOO TREATMENT

This mild shampoo provides instant and intense care to the hair - inside and outside. A completely new approach to provide extensive and comprehensive hair care to fix hair structure damage from daily handling.

PHASE A	INCI Name	% (w/w)
Demineralized Water	Aqua	≤ 100.00
Carbopol Aqua SF-13	Acrylates Copolymer	5.00
NaOH 25%	Sodium Hydroxide	adjust to pH ~8
PHASE B		
BergaSoft SCI 80¹	Sodium Cocoyl Isethionate	10.00
Glycerin 99.5	Glycerin	2.00
EDTA	Tetrasodium EDTA	0.20
Sorbitol 70%	Sorbitol	4.00
PHASE C		
BergaSoft LG 501	Lauryl Glucoside	5.00
BergaCare EM-HE7 ¹	PEG-7 Glyceryl Cocoate	3.00
Cocamidopropyl Betaine 30%	Cocamidopropyl Betaine	8.00
PHASE D		
GlyAcid® 70 HP ²	Glycolic Acid (and) Aqua	4.00
NaOH Solution 25%	Sodium Hydroxide	adjust pH ~4
PHASE E		
PCA Glyceryl Oleate	PCA Glyceryl Oleate	0.50
Silk Protein	Aqua, Hydrolyzed Silk, Potassium Sorbate	2.00
PHASE F		
Preservative/Fragrance	-	q.s.

Procedure

Phase A: Weigh water and Carbopol Aqua, start stirrer and add NaOH until clear with pH ~8. Phase B: Add raw materials and heat to ~70°C. Phase C: Once fully dissolved, add materials and cool to 40°C while stirring. Phase D: Add GlyAcid® and NaOH and wait 5 minutes, then add Phase E. Preserve and adjust pH

Suppliers

¹Berg + Schmidt, ²CrossChem distributed by Berg + Schmidt, ³Lubrizol

Properties

Note: For optimal effectiveness of GlyAcid®, we recommend working with a pH between 3.8 and 4.3

pH: ~4

viscosity: (24H) = na

Internal Ref:

Formulation provided by:



SHEER SHINE CONDITIONER FOR BRILLIANT APPEARANCE

A smooth and supple hair surface is essential for a vibrant and glossy hair appearance. The hair conditioner below will significantly improve the hair surface condition, provide shine and enhance manageability of the hair due to the powerful action of **GlyAcid®70 HP**.

PHASE A	INCI Name	% (w/w)
Demineralized Water	Aqua	≤ 100.00
BergaCare FG 5 ¹	Ethylhexyl Palmitae (and) Ethylexyl Stearate (and) Hydrogenated Olive Oil Unsaponifiables (and) Caprylic/Capric Triglyceride	5.00
Cetrimonium Chloride	Cetrimonium Chloride	2.0
Aloe Vera	Aloe Barbadensis Leaf Juice Powder	0.20
Hydroxyethylcellulose	Hydroxyethylcellulose	0.50
PHASE B		
Vegarol 1618 50:50¹	Cetearyl Alcohol	3.00
BergaCare SB ¹	Butyrospermum Parkil (Shea) Butter	2.00
Stearyl Alcohol	Stearyl Alcohol	2.00
Cetyl Alcohol	Cetyl Alcohol	2.00
Grape Seed Oil	Vitis Vinifera (Grape) Seed Oil	1.00
Cocos Oil	Cocos Nucifera Oil	1.00
Glyceryl Stearate Citrate	Glyceryl Stearate Citrate	1.00
PHASE C		
GlyAcid® 70 HP ²	Glycolic Acid (and) Water	2.00
NaOH (25% solution)	Sodium Hydroxide	2
PHASE D		
Hydrolyzed Wheat Protein Panthenol	Hydrolyzed Wheat Protein Panthenol	2.00
PHASE E		
Preservative/Fragrance	-	q.s.

Procedure

Phase A: Weigh water, BergaCare FG 5 and cetrimonium chloride then begin stirring. Add aloe vera and hydroxyethylcellulose and continue to stir. Phase B: Add Phase B raw materials and heat to 75 °C. Add Phase B to Phase A while stirring, homogenize for 30 seconds. Cool to 40 °C. Phase C: Add GlyAcid® mix and Phase D. Adjust pH and preserve.

Suppliers

¹Berg + Schmidt, ²CrossChem distributed by Berg + Schmidt

Properties

Note: For optimal effectiveness of GlyAcid®, we recommend working with a pH between 3.8 and 4.3

pH: ~4

viscosity: (24H) = na

Internal Ref:

Formulation provided by:



PROTECTIVE LEAVE-IN CONDITIONING SPRAY

This leave-on treatment with **GlyAcid®** and **BergaCare** provides care and protection against environmental factors such as dirt, sunlight and humidity. Our well-thought-out composition delivers a pleasant feel to the touch all day long.

PHASE A	INCI Name	% (w/w)
Demineralized Water	Aqua	≤ 100.00
Glycerin (99.5%)	Glycerin	2.00
Xanthan Gum	Xanthan Gum	0.20
PHASE B		
	Ethylhexyl Palmitae (and) Ethylexyl Stearate (and)	
BergaCare FG 5 ¹	Hydrogenated Olive Oil Unsaponifiables (and) Capryl-	3.00
	ic/Capric Triglyceride	
BergaCare SB1	Butyrospermum Parkil (Shea) Butter	1.50
Ceteareth-20	Ceteareth-20	2.00
Glycercyl Stearate Citrate	Glycercyl Stearate Citrate	0.50
Steareth-2	Steareth-2	2.00
PHASE C		
GlyAcid® 70 HP ²	Glycolic Acid (and) Water	2.50
NaOH (25% solution)	Sodium Hydroxide	2.50
PHASE D		
Preservative/Fragrance	-	q.s.

Procedure

Phase A: Weigh water and glycerin and add xanthan gum while stirring. **Phase B:** Weigh all raw materials from Phase B and heat both phases up to ~75 °C. Once oil phase is dissolved, add to Phase A while stirring and homogenize for 30 seconds. **Phase C:** Cool to 40 °C, add Panthenol and GlyAcid® mix and preserve with **Phase D.**

Suppliers

¹Berg + Schmidt, ²CrossChem distributed by Berg + Schmidt

Properties

Note: For optimal effectiveness of GlyAcid®, we recommend working with a pH between 3.8 and 4.3

pH: ~4

viscosity: (24H) = na Internal Ref:

Formulation provided by:



HAIR SHAMPOO & BODY WASH

A **GlyAcid® 70 HP** based shampoo and body wash targeting both hair and skin care in a one-step solution to your daily routine.

PHASE A	INCI Name	% (w/w)
Deionized Water	Aqua	≤ 100.00
Jaguar® Excel ¹	Guar Hydroxypropyltrimonium Chloride	0.50
MG-60 ¹	Maltooligosyl Glucoside (and) Hydrogenated Starch Hydrolysate	1.00
PHASE B		
	Sodium Trideceth Sulfate Sodium	
Miracare® NSLB1	Lauroamphoacetate Diethylhexyl Sodim	48.00
	Sulfosuccinate	
PHASE C		
ВНТ	ВНТ	0.05
Olive Oil	Olea Europaea (Olive) Fruit Oil	7.00
PHASE D		
2024711 AD Apple Fresh ¹	Perfume	1.50
PHASE E		
GlyAcid® 70 HP²	Glycolic Acid (and) Water	2.00
Preservative	Preservative	0.50

Procedure

Phase A: Disperse Jaguar® Excel in water then add other phase A ingredients, mix well. Phase B: Add phase B to phase A and mix for 10 minuets. Phase C: Heat phase C to 50 oC. Add heated phase to phase AB, mix for 10 minuets. Phase D: Add phase D to phase ABC, mix for 5 minuets. Phase E: Add phase E to phase ABCD, mix for 10 minuets.

Suppliers

¹Brenntag, ²CrossChem distributed by Brenntag

Properties

pH: 5.50

viscosity: (24H) = na

Internal Ref: LHC20191115

Formulation provided by:



KERATIN HAIR SERUM

Enhanced moisturization and conditioning serum with **GlyAcid® 70 HP** to assist in the repair of damaged hydrogen lateral links within the hair cortex.

PHASE A	INCI Name	% (w/w)
Demin. Water	Aqua	≤ 100.00
Tetrasodium EDTA	EDTA	0.10
Satiaxane VPS 9301	Xanthan Gum	0.20
Zemea® Propanediol¹	1,3-Propanediol	3.00
AC Plant Keratin PF ¹	Hydrolyzed Corn Protein & Hydrolyzed Wheat Protein & Hydrolyzed Soy Protein	0.50
MG-60 ¹	Maltooligosyl Glucoside (and) Hydrogenated Starch Hydrolysate	1.00
Trahalose 100¹	Trahalose	1.00
GlyAcid® 70 HP2	Glycolic Acid (and) Water	1.00
Coconut-Avocado Hair Milk¹	Water (and) Cocos Nucifera (Coconut) Oil (and) Persea Gratissima (Avocado) Oil (and) Propanediol (and) Glyceryl Stearate (and) Phospolipids (and) Cocos Nucifera (Coconut) Liquid Endosperm (and) Cocos Nucifera (Coconut) Fruit Juice (and) Polyglyceryl-10 Oleate (and) Polyglyceryl-10 Dioleate (and) Cetearyl Alcohol (and) Sodium Stearoyl Lactylate (and) Glycerin	2.00
Optiphen BSB-W ¹	Benzyl Alcohol (and) Aqua (and) Sodium Benzoate (and) Potassium Sorbate	0.30

Procedure

Phase A: For specific procedures, contact your local Brenntag representative.

Suppliers

¹Brenntag, ²CrossChem distributed by Brenntag

Properties

pH: adjust as desired

viscosity: (24H) = na

Internal Ref: 20FKHS-01

Formulation provided by:



MICELLAR GLYCOLIC CONDITIONER

A **GlyAcid® 70 HP** based conditioner with Polycare®, Erylite®, Zemea® and other proven ingredients to improve the feel and appearance of hair.

PHASE A	INCI Name	% (w/w)
Deionized Water	Aqua	≤ 100.00
Sodium gluconate	Sodium Gluconate	0.10
Jaguar® HP 105¹	Hydroxypropyl Guar	0.50
Erylite® Erythritol F8030¹	Erythritol	2.00
Polycare® Split Therapy¹	Hydropropyl Guar Hydroxrpropyltrimonium Chloride	0.30
Jaguar® Optima¹	Guar Hydroxrpropyltrimonium Chloride	0.20
Purac® UltraPure 90¹ (to pH 4.0-4.5)	Lactic Acid	qs
Zemea® Propanediol¹	1,3-Propanediol	3.00
PHASE B		
Fentacare® 2231 MS 1 901	Behentrimonium Methosulfate	3.00
Ceterayl Alcohol	Cetearyl Alcohol	8.50
Makcaderm LIA ¹	Isoamyi Laurate	3.50
PHASE C		
Fentacare® 1631	Cetrimonium Chloride	3.00
PHASE D		
2004543 Love Potion F. ¹	Fragrance	1.00
Preservative	Preservative	0.50
PHASE E		
GlyAcid® 70 HP²	Glycolic Acid (and) Water	2.00
PHASE E		
Sodium Hydroxide (to pH 4.0-4.5)	Sodium Hydroxide	qs

Procedure

Phase A: Mix phase A in water and then disperse Jaguar® Excel and Polycare® Split Therapy in water and adjust pH to 3.5-5.0. Phase B: Melt phase B at 70-75 °C and add phase until homogeneous. Phase C: Add phase C to part AB until homogeneous. Phase P&E: Cool to 40-45 °C, add phase DE, stir until homogeneous. Phase F: Adjust pH to 4.00-4.50.

Suppliers

¹Brenntag, ²CrossChem distributed by Brenntag

Properties

pH: 4.12

viscosity: Spindle 63 @ 0.3 rpm = 241.000 cP

Internal Ref: LHC20191008

Formulation provided by:



REGENERATING HAIR CONDITIONER

Regenrate the silky and lusturous feel of your hair with honey, vitamin E and GlyAcid® 70 HP

PHASE A	INCI Name	% (w/w)
Demin. Water	Aqua	≤ 100.00
Tetrasodium EDTA	EDTA	0.10
Mackine 301 ¹	Stearamidopropyl Dimethylamine	1.50
GlyAcid® 70 HP ²	Glycolic Acid (and) Water	1.00
MG-60 ¹	Maltooligosyl Glucoside (and) Hydrogenated Starch Hydrolysate	1.50
Zemea® Propanediol¹	1,3-Propanediol	2.00
PHASE B		
CO 1698 ¹	Cetyl Alcohol	2.00
Lipomulse Luxe ¹	Cetearyl Alcohol (and) Glyceryl Stearate (and) PEG-40 Stearate (and) Ceteareth 20	5.00
Lipovol Argan Virgin ¹	Argania Spinosa Kernel Oil	3.00
Liponate CCC MB ¹	Coco-Caprylate/Caprate	1.00
Vitamin E ¹	Tocopheryl Acetate	1.00
PHASE C		
AC Quaternized Honey ¹	Hydroxypropyltrimonium Honey	1.00
AC Plant Keratin PF ¹	Hydrolyzed Corn Protein & Hydrolyzed Wheat Protein & Hydrolyzed Soy Protein	0.50
Glydant Plus Liquid ¹	DMDM Hydantoin (and) Todopropynyl Butylcarbamate	0.30
KOH Solutino (50%)	Potassium Hydroxide	0.80
Timeless Rose ¹	Fragrance	0.50

Procedure

Phase A: For specific procedures, contact your local Brenntag representative.

Suppliers

¹Brenntag, ²CrossChem distributed by Brenntag

Properties

pH: adjust as desired
viscosity: (24H) = na
Internal Ref: 19FRHC-01

Formulation provided by:



REJUVENATING SULFATE-FREE SHAMPOO

A repairing and rejuvenating sulfate-free shampoo with proteins and GlyAcid® 70 HP

PHASE A	INCI Name	% (w/w)
Deionized Water	Aqua	≤ 100.00
EDTA	EDTA	0.30
Jaguar® Excel ¹	Guar Hydroxrpropyltrimonium Chloride	0.20
GlyAcid® 70 HP ²	Glycolic Acid (and) Water	3.00
Miracare Soft S-525 ¹	Water, Sodium Methyl Cocyl Isethionate, Sodium Methyl Oleyl Taurate, Cocamide MIPA, Decyl Glucoside, Cocamidopropyl Hydroxysultaine	20.00
Mackanate EL ¹	Disodium Laureth Sulfosuccinate	0.50
AC Plant Keratin PF ¹	Hydrolyzed Corn Protein & Hydrolyzed Wheat Protein & Hydrolyzed Soy Protein	0.50
Zemea® Propanediol¹	1,3-Propanediol	3.00
Flocare C107 LM ¹	Polyquaternium 7	1.00
KOH Solution (50%)	Potassium Hydroxide	0.30
Glydant Plus Liquid ¹	DMDM Hydantoin (and) Todopropynyl Butylcarba- mate	3.50
Timeless Rose ¹	Fragrance	0.50

Procedure

Phase A: Add EDTA to water, mix until homogeneous. Add Jaguar® Excel and mix until well dispersed. Hydrate by adjusting pH to 3.5-5.0 using citric acid, mix for 15 minuets. Once hydrated to full viscosity, add amphoterics/non-ionic surfactant first, Miracare Soft S-525, 20%. Add anionic surfactant and mix until homogeneous (Mackanate EL). Add remaining ingredients and mix until homogeneous.

Suppliers

¹Brenntag, ²CrossChem distributed by Brenntag

Properties

рН: -

viscosity: -

Internal Ref: 20FRSFS-01

Formulation provided by:



REPLENISHING SHAMPOO WITH GLYACID®

A Reinolderm and **GlyAcid® 70 HP** infused shampoo with a touch of Love Potion fragrance for that replenishing feel and look of beauty.

PHASE A	INCI Name	% (w/w)
Demin. Water	Aqua	≤ 100.00
Sodium Gluconoate ¹	Sodium Gluconate	0.10
Erythritol Erylite ¹	Erythritol	2.00
Mackol® CAS 100N	Sodium Coco-Sulfate	10.00
Zemea® Propanediol ¹	1,3-Propanediol	2.00
PHASE B		
Miranol® Ultra C-32¹	Sodium Cocoamphoacetate	6.00
Miratan® BET C-30 NP¹	Cocamidopropyl Betaine	8.00
PHASE C		
GlyAcid® 70 HP ²	Glycolic Acid (and) Water	1.00
PHASE D		
Preservative	Preservative	0.50
Reinolderm OLV3 ¹	Olive Oil PEG-7 Esters	3.00
PHASE E		
2004543 Love Potion F1	Fragrance	1.50
Alkamuls® CRH40	PEG-40 Hydrogenated Castor Oil	1.50

Procedure

Phase A: Premix phase A and heat to 70-80 °C, stir until clear. Phase B: Add phase B to phase A, stir until homogeneous. Phase C &D: Add phase C and phase D to AB, stir until homogeneous. Phase E: Premix phase E and add to ABCD, stir until homogeneous. Adjust

Suppliers

¹Brenntag, ²CrossChem distributed by Brenntag

Properties

pH: 4.18

viscosity: Spindle 62 @ 30 rpm = 591.9 cP

Internal Ref: LHC20191007

Formulation provided by:



GLYCOLIC ACID SHAMPOO BT

A blend of **GlyAcid®**, Miranol®, Miratain® and other unique ingredients to improve the manageability and appearance of hair.

PHASE A	INCI Name	% (w/w)
DI Water	Aqua	≤ 100.00
Sodium Gluconate	Sodium Gluconate	0.10
Erythritol Erylite	Erythritol	2.00
Palmfonate 6709F	Sodium Methyl Palmitate Solfonate	10.00
Palmester 5101	Glycol Distearate	2.00
Zemea® Propanediol¹	1,3-Propanediol	5.00
PHASE B		
Soypon L-30	Sodium Lauroyl Sarcosinate	5.00
Miranol® Ultra L-32¹	Sodium Lauromphoacetate	3.00
Miratan® BET C-30 NP¹	Cocamidopropyl Betaine	8.00
PHASE C		
GlyAcid® 70 HP ²	Glycolic Acid (and) Water	2.50
PHASE D		
Preservative	Preservative	0.50
Reinolderm OLV3 ¹	Olive Oil PEF-7 Esters	3.00
2024429 Frumix Strong ¹	Fragrance	1.00
PHASE E		
Cocamide DEA	Cocamide DEA	1.00
Sodium Hydroxide to pH 6.0-7.0	Sodium Hydroxide	qs

Procedure

Phase A: Premx phase A and het to 70-80 °C, stir until clear. Phase B: Add phase B to phase A, stir until homogeneous. Phase C: Add phase C to phase AB, stir until homogeneous. Phase D: Add phase D to phase ABC, stir until homogeneous. Phase E: Add phase E to phase ABCD, stir until homogeneous.

Suppliers

¹Brenntag, ²CrossChem distributed by Brenntag

Properties

pH: 6.65

viscosity: Spindle 62 @ 20 rpm = 1.042 cP

Internal Ref: LHC20191007

Formulation provided by:





HIBISCUS EXFOLIATING AND FOAMING JELLY

This pink, hibiscus-infused jelly utilizes **GlyAcid®** to chemically exfoliate the skin and **Fiflow®** perfluorocarbon technology to reduce the appearance of wrinkles and fine lines. Olive esters and Micromatrix® quickly condition the skin leaving it exfoliated and conditioned.

Micromatrix® Fractile CAT ^{1,2} Aqua (and) Corn Starch Modified (and) Polyquaternium-10 Hydrasoft® Pine ^{1,2} Aqua (and) Hydroxyethylcellulose (and) Preservative System	57.65
Hvdrasoft® Pine ^{1,2}	15.00
•	
Olivatis™ 15¹ Olive Oil Glycereth-8 Esters)	10.00
GlyAcid® 70 HP ^{1,3} Glycolic Acid (and) Aqua	6.00
Hibiscus Tea ^{1,4} Hibiscus Sabdariffa	0.35
PHASE B	
Perfluorohexane (and) Perfluorodecalin (and) Perfluoroperfluoroperhydrophenanthrene (and) Perfluorodimethylcy-clohexane	5.00
Fiflow® BB611.2 Perfluorohexane (and) Perfluorodecalin (and) Perfluoroproane	3.00
Endicare® FB-810¹ Hydrolyzed Cornstarch	3.00

Procedure

Phase A: Add Phase A to main vessel with shear mixing. Note: Allot time for hibiscus powder to completely wet-out. **Phase B**: Add Phase B to main vessel under high shear. Transfer to final container.

Suppliers

¹Coast Southwest, Inc., ²The Innovation Company®, ³CrossChem, ⁴Tea Guys

Properties

pH: 2.50 - 3.0

Viscosity: spindle 4 @ 60 rpm = 2,500 to 3,500

Formulation provided by:



COMPLEXION CLEARING FACIAL CREAM

This lubricious facial cream with **GlyAcid®** has a unique cushiony texture. **AstaDerm™ 200** provides skin tightening. MedXtract Witch Hazel contains soothing and mild astringent properties.

PHASE A	INCI NAME	% (w/w)
Deionized Water	Aqua	80.40
Dissolvine® NA2-S ^{1,2}	Disodium EDTA	0.05
Glycerin ¹	Glycerin	2.50
PHASE B		
Stabylen 30 ^{1,3}	Acrylates/Vinyl Isodecanoate Crosspolymer	0.50
PHASE C		
Safflower Oil ¹	Carthanmus Tinctorius (Safflower) Seed Oil	4.00
Jojoba Oil ^{1,4}	Simmondsia Chinensis (Jojoba) Seed Oil	3.00
Endicare® LI-71	PEG-7 Glyceryl Cocoate	0.80
Cetyl Alcohol ¹	Cetyl Alcohol	1.50
Vitamin E Acetate ¹	Tocopheryl Acetate	0.10
PHASE D		
NaOH 20% aq. solution	Sodium Hydroxide	1.00
GlyAcid® 70 HP ^{1,5}	Glycolic Acid (and) Aqua	2.85
PHASE E		
Endimoist® HA Solution ¹	Sodium Hyaluronate	0.50
PHASE F		
AstaDerm™ 200¹ (Porphyridium Polysaccharide	1.00
MedXtract Witch Hazel Distilled ^{1,6}	Hamamelis Virginiana Leaf Water	1.00
Sharon Biomix Free CG ^{1,7}	(Caprylyl Glycol (and) Propylene Glycol (and) Glycerin (and) Citrus Reticulata Fruit Extract (and) Citrus Aurantium (and) Amara Fruit Extract (and) Citrus Sinensis Peel Extract (and) Ascorbic Acid (and) Citric Acid (and) Lactic Acid (and) Water)	0.80%

Procedure

Phase A: In main vessel, add Phase A, mix, and heat to 60°C. Phase B: Slow add Phase B to Phase A until dissolved. Phase C: In a separate vessel, mix Phase C and heat to 140°F (60°C). At temperature, increase mixing speed,4 and add slowly Phase C to Phase AB. Allow the mixture to become uniform. Phase D: Add Phase D to Phase ABC. The mixture may thicken. Maintain mixing and discontinue heating. Allow mixture to cool to 104°F (40°C). Phase E and F: Add Phases E and F in order to Phase ABCD. Cool to 77 to 86°F (25 to 30°C) and transfer to holding vessel.

Suppliers

¹Coast Southwest, Inc., ²Akzo Nobel Functional Chemicals LLC, ³3V Sigma-USA, ⁴Jojoba Desert (A.C.S.) Ltd., ⁵CrossChem, ⁶Medolla Limited, ⁷Sharon-Laboratories Ltd.

Properties

pH: 4.40

Viscosity: 3,000 to 5,000 cst.

Estimated SPF value available upon request.

Formulation provided by:



DOUBLE ACTION RINSABLE PEEL WITH GLYACID®

The two most effective peeling methods are mechanical and chemical, imagine a product combining both: the well recognized action of the smallest Alpha Hydroxy Acid (AHA) **GlyAcid®** and ecological exfoliating beads from our **BergaScrub** range. The transparency of this formulation will make it even more appealing to the consumer.

PHASE A	INCI Name	% (w/w)
Sodium Laureth Sulfate 70%	Sodium Laureth Sulfate	10.00
Cocamidopropyl Betaine 30%	Cocamidopropyl Betaine	10.00
EDTA	Tetrasodium EDTA	0.10
BergaSoft DG 501	Decyl Glucoside	2.50
Glycerin	Glycerin	2.00
Demineralized Water	Aqua	≤ 100.00
PHASE B		
CarbopolAqua SF - 2 ³	Acrylates Crosspolymer-4	5.00
PHASE C		
NaOH	Sodium Hydroxide	up to pH 7
PHASE D		
GlyAcid® 70 HP2	Glycolic Acid (and) Water	2.90
NaOH	Sodium Hydroxide	up to desired pH
PHASE E		
BergaScrub 400¹	Hydrogenated Castor Oil	1.00
Preservative/Fragrance	-	q.s.

Procedure

Weigh **Phase A** and stir until homogeneous. Add **Phase B** to Phase A. Neutralize with **Phase C**. Weigh **Phase D** and adjust to desired pH, add the solution to previous mixture drop by drop. Add **Phase E** slowly at the end to avoid mixing air with the formulation and to allow it to remain transparent.

Suppliers

¹Berg + Schmidt, ²CrossChem distributed by Berg + Schmidt, ³Lubrizol

Properties

pH: 4.8

Viscosity: (24H) = 6800 Cps

Stability under progress: Intern ID: RPO K146

Formulation provided by:



DEEP CLEANSING PURIFYING GEL

Enjoy a deep **GlyAcid®** clean with the purifying properties of Tea Tree in this refreshing treatment.

PHASE A	INCI Name	% (w/w)
Deionized Water	Aqua	≤ 100.00
Sodium Glyconate ¹	Sodium Glyconate	0.10
MG-60 ¹	Maltooligosyl Glucoside (and) Hydrogenated Starch Hydrolysate	3.00
Glucomate DOE 120	PEG-120 Methyl Glucose Dioleate	2.00
Mackol® CAS 100N¹	Sodium Coco-Sulfate	10.00
PHASE B		
Miranol® Ultra L-32¹	Sodium Lauroamphoacetate	7.00
Miratain® BET C-30 NP¹	Cocamidopropyl betaine	8.00
PHASE C		
Salicylic Acid ¹	Salicylic Acid	0.50
Zemea® Propanediol	1,3-Propanediol	5.00
Alcohol	Alcohol	3.00
PHASE D		
GlyAcid® 70 HP ²	Glycolic Acid (and) Water	1.00
Preservative	Preservative	0.50
PHASE E		
2026919 Purifying Tea Tree ¹	Fragrance	0.20
Alkamuls® CRH40	PEG-40 Hydrogenated Castor Oil	0.60
PHASE F		
25% NaOH (5.0-5.5)	Sodium Hydroxide	0.70

Procedure

Phase A: Premix ingredients in phase A and heat up to 70-80 °C, stir until clear. Phase B: Add phase B to phase A, stir until homogeneous. Phase C & D: Add phase C & phase D into phase AB and stir until homogeneous. Phase E: Premix phase E and add to phase ABCD and stir until homogeneous. Adjust pH to 5.0 - 5.5.

Suppliers

¹Brenntag, ²CrossChem distributed by Brenntag

Properties

pH: 5.1

Internal Ref: LCS20190102

Formulation provided by:



SLICK GLYCERIN SHAVE SOAP

This solid shaving soap turns a morning routine into a spa experience. **GlyAcid® 70 HP** exfoliates, Jojoba butter softens and soothes the skin. The mildness of **Endinol® B-SF65** helps reduce irritation. Wet the shaving brush and then swirl it vigorously across the bar until bristles are coated. Brush the cheeks and neck to form a dense and stable lather that helps a razor glide. Accessorize this shaving soap with a special shaving brush, a stone shaving scuttle and a brand medallion on the bar.

PHASE A	INCI NAME	% (w/w)
Glycerin 99.7% USP ¹	Glycerin	20.00
Dipropylene Glycol ¹	Dipropylene Glycol	5.00
Endinol® MILD B-SF65	Sodium Cocoyl Isothionate (and) Cocamidopropyl Hydroxysultaine (and) Lauryl Glycoside (and) Cocamidopropylamine Oxide (and) Caprylyl/Capryl	30.00
PHASE B		
Stearic Acid1	Stearic Acid	13.00
Myristic Acid1	Myristic Acid	6.00
JD Jojoba Colorless Butter V ^{1,2}	Simmondsia Chinensis (Jojoba) Seed Oil (and) Beeswax (and) Hydrogenated Vegetable Oil	6.00
PHASE C		
Deionized Water	Aqua	8.70
Sodium Hydroxide (100%)	Sodium Hydroxide	3.00
Endiquest® GLDA¹	Tetrasodium Glutamate Diacetate	1.00
PHASE D		
GlyAcid® 70 HP1.3	Glycolic Acid (and) Aqua	2.00
Sodium Hydroxide (30%) w/w	Sodium Hydroxide	q.s.
PHASE E		
Deionized Water	Aqua	5.00
Titanium Dioxide 3328	Titanium Dioxide	1.00

Procedure

Phase A: With proper personal protective equipment (PPE), add Phase A to main vessel. Heat to 60°C with moderate mixing. Phase B: Add Phase B to Phase A and heat to 68°C. Mix until disolved. Phase C: Add Phase C in a separate vessel. Phase D: In a third vessel, create Phase D by neutralizing GlyAcid® 70 HP with sodium hydroxide 30% soltion to pH 7.0 to 8.0. Add Phase D to Phase C. Add Phase CD to Phase AB slowly to avoid forming large clumps of soap. Phase E: Disperse titanium dioxide into water form Phase E and add to Phase ABCD. Mix until homogeneous. Let vessel stand for one hour at 68°C. Test pH with a 10% solution. When pH is confirmed, pour into soap molds and allow to sit undisturbed for 24 hours before use.

Suppliers

¹Coast Southwest, Inc., ²Jojoba Desert (A.C.C.S.), ³CrossChem LP

Properties

pH: 9.0 - 10.0

Viscosity: N/A

Internal Ref: CSW 012-25

Formulation provided by:



OVERNIGHT MIRACLE MASK

Preservative/Fragrance

An overnight facial mask for refreshed and refined skin. GlyAcid® 70 HP stimulates cell turnover, smooths acne-related scars and helps refine skin texture. BergaCare SB provides intense and natural care. BergaCare FG Olive gives a non-tacky, caring feel.

PHASE A	INCI NAME	% (w/w)
Demineralized Water	Aqua	≤ 100.00
Glycerin	Glycerin	2.00
Polyglyceryl-3 Palmitate	Polyglyceryl-3 Palmitate	3.00
Agenaflo 9050 ²	Corn Starch Modified	1.00
Carbopol Ultrez 30 ⁴	Carbomer	0.10
Propylene Glycol	Propylene Glycol	1.00
Xanthan Gum	Xanthan Gum	0.0
PHASE B		
BergaCare SB ¹	Butyrospermum Parkii (Shea) Butter	2.00
BergaCare FG Olive ¹	Hydrogenated Ethylexyl Olivate (and) Hydrogenated Olive Oil Unsaponifiables	2.00
BergaBest GS 401	Glyceryl Stearate	2.00
Bergazid 98 18 ¹	Stearic Acid	1.00
Cera Alba	Cera Alba	2.00
Stearyl Alcohol	Steary Alcohol	1.00
Soybean Oil	Glycine Soja (soybean) Oil	1.00
Apricot Kernel Oil	Prunus Armenicaca Kernel Oil	1.00
Dicaprylyl Ether	Dicaprylyl Ether	1.00
PHASE C		
GlyAcid® 70 HP1.4	Glycolic Acid (and) Aqua	1.70
	Sodium Hydroxide	2.00

Procedure

Phase A: Weigh water and glycerine and add Carbomer on top. Wait 5 minutes (wetting time). Start stirrer and add all other raw materials of Phase A. **Phase B:** Weigh Phase B and heat both phases up to 75 °C. Add Phase B to Phase A while stirring and homogenize for 30 seconds. **Phase C:** Cool down to 40 °C, then add phase C while stirring and preserve.

Suppliers

¹Berg + Schmidt, ²Agrana, ³CrossChem distributed by Berg + Schmidt, ⁴Lubrizol

Properties

Note: For optimal effectiveness of GlyAcid®, we recommend working with a pH between 3.8 and 4.3

pH: 4.0

q.s.

Viscosity: 4,340

Internal Ref: GM 001-SDI

Formulation provided by:



BERRY SMOOTHIE BRIGHTENING CREAM

This non-abrasive, leave-on exfoliant cream brightens skin for an overall improvement in complexion and evenness of skin tone. GlyAcid® 99 HP, a high purity glycolic acid in 99% crystalline form, gently exfoliates. Endimate® IPM and Endicare® TN promote a smooth spreading and wetting of the cream, while reducing greasiness and imparting a dry, emollient feel. Vegetable-derived Olivatis™ 12 is an excellent water in oil emulsifier that formulates a silky, smoothie texture emulsion. Scandinavian Nordic Beauty® Lingonberry is a natural antioxidant super-fruit and colorant, known to maintain skin firmness, reduce hyperpigmentation, and protect skin from premature aging.

PHASE A		% (w/w)
Safflower Oil ¹	Carthamus Tinctorius (Safflower) Seed Oil	2.00
Colorless Jojoba Oil ^{1,2}	Simmondsia Chinensis (Jojoba) Seed Oil	4.00
Vitamin E Acetate ¹	Tocopheryl Acetate	0.50
Endimate® 33V1	Caprylic/Capric Triglyceride	4.00
Endimate® IPM1	Isopropyl Myristate	3.00
Endicare® TN1	C12-15 Alkyl Benzoate	2.00

PHASE B

Olivatis™ 12¹,3	Polyglyceryl-3 Pentaolivate	7.00
Creabase MSO ^{1,4}	Limnanthes Alba (Meadowfoam) Seed Oil (and) Cera Alba (and) Hydrogenated Meadowfoam Seed Oil	1.50
Sunflower Wax ¹	Helianthus Annuus (Sunflower) Seed Oil	0.25

PHASE C

Deionized Water	Aqua	63.95
Dissolvine® NA2-\$1,5	Disodium EDTA	0.20
Glycerin ¹	Glycerin	1.00
Propylene Glycol ¹	Propylene Glycol	3.50
GlyAcid® 99 HP1.6	Glycolic Acid	4.00
NaOH 40% aq. Solution	Sodium Hydroxide	q.s.
Nordic Beauty® Lingonberry Dispersion ^{1,4}	(Water (and) Vaccinium Vitis-Idaea Fruit Extract (and) Maltodextrin (and) Sodium Benzoate (and) Potassium Sorbate)	1.50%
NaCl (Sodium Chloride)	Sodium Chloride	0.60%
Sharomix EG14 ^{1,7}	(Ethylhexylglycerin (and) Phenoxyethanol)	1.00%

Procedure

Phase A: In main vessel, mix ingredients heating to 70-75 °C. Phase B: Once at desired temperature, add phase B to phase A with continuous mixing. Phase C: Disperse Phase C in a separate vessel until a uniform mixture is formed. Adjust pH of GlyAcid® using NaOH to pH above 4.2. Add Phase C to Phase AB slowly under agitation of 500-600 rpm while maintaining the temperature above 70 °C. Adjust the mixing speed to combine the two phases with a small vortex. Continue mixing the solution for 15 to 20 minutes until fully uniform. Switch to homogenizer and homogenize for 30 seconds at 3.0 rpm while the emulsion is still at 70 °C.

Suppliers

¹Coast Southwest, Inc. ²Jojoba Desert, ³Medolla Limited, ⁴The Innovation Company⁸, ⁵AkzoNobel Functional Chemicals LLC, ⁴CrossChem, ⁷Sharon-Laboratories, Ltd.

Properties

pH: n/a

Viscosity: spindle 6 @ 12 rpm = 23,330 cst

Formulation provided by:



BRIGHTENING CRÈME CLEANSER

PHASE A

This cleanser utilizes **GlyAcid**® for gentle exfoliation to reveal an instantly brighter-looking complexion. The sugar-based **Glucotain® Care** imparts emolliency and lubricity to the foam, leaving a pampered and pleasant skin feel after washing, without excessive dryness.

INCI NAME

PHASE A	INCI NAME	/0 (W/W)
Deionized Water	Aqua	55.20
Dissolvine® 100-S ^{1,2}	Tetrasodium EDTA	0.20
Chembetaine™ CAS Surfactant ^{1,3}	Cocamidopropyl Hydroxysultaine	10.00
Hostapon® SCI-851.4	Sodium Cocoyl Isethionate	6.00
Endinol® MILD CC-1250¹	Coco-Glucoside	3.00
GlucoTain® Care ^{1,4}	Cocoyl Methyl Glucamide	5.00
PHASE B		
Olive Oil ¹	Olea Europaea (Olive) Fruit Oil	4.00
Refined Avocado Oil ¹	Persea Gratissima (Avocado) Oil	3.00
Stearic Acid ¹	Stearic Acid	4.00
Endimulse® EGMS ¹	Glycol Stearate	3.00
Myristic Acid ¹	Myristic Acid	0.80
Palmitic Acid ¹	Palmitic Acid	1.50
PHASE C		
NaOH 40% aq.	Sodium Hydroxide	0.80
PHASE D		
GlyAcid® 70 HP ^{1,5}	Glycolic Acid (and) Aqua	1.70
NaOH 40%	Sodium Hydroxide	q.s.
PHASE E		
Sharomix 706 ^{1,6}	Dehydroacetoc Acid (and) Benzoic Acid (and) Benzyl Alcohol	0.80
PHASE F		
Olivatis [™] 15 ^{1,7}	Olive Oil Glycereth-8 Esters	1.00%
Fragrance	Fragrance	q.s.%

Procedure

% (w/w)

Phase A: Mix Phase A ingredients in formula order into main vessel with heating to 70°C-75°C. Mix until fully uniform. Phase B: In a separate vessel, combine Phase B ingredients with propeller mixing and begin heating to 70°C-75°C. Add Phase B to Phase A with continued mixing. Mix until fully dispersed and uniform. Phase C: Add Phase C to Phase AB until desired pH is achieved. Begin cool down. Phase D: In a separate vessel, combine Phase D ingredients with continuous mixing. Note: Allot time for NaOH to neutralize glycolic acid above pH 4.2. Once Phase ABC is below 40°C, add Phase D to Phase ABC. Phase E: Add Phase E to Phase ABCD with continuous mixing. Phase F: Combine Phase F ingredients and add to Phase ABCDE.

Suppliers

Coast Southwest, Inc.., ²AkzoNobel Functional Chemicals LLC, ³Lubrizol Advanced Materials, ⁴Clariant, ⁵CrossChem, ⁴Sharon Laboratories, Ltd., ⁷Medolla Limited

Properties

pH: 6.0-6.5

Viscosity: spindle 4 @10 rpm = 12,000-14,000 cst.

Formulation provided by:



CITRUS MORNING BURST CLEANSER

This natural cleanser has orange peel and **GlyAcid®** for mild exfoliation. Sodium Coco-Sulfate delivers a mild cleaning. Avocado Oil, Shea Butter, and Olive Ester emulsifiers create a gel cream texture.

PHASE A	INCI NAME	% (w/w)
Deionized Water		59.50
Endinol® SCS1 (Sodium Coco-Sulfate)	Aqua	10.00
PHASE B		
Sorbitol 70%	Sorbitol	10.00
GlyAcid® 70 HP ^{1,2}	Glycolid Acid	1.00
Endicare® CitraBlend Orange (400 mesh)	Citrus Sinensis (Orange) Peel Powder	3.00
Endimate® 33V¹	Caprylic/Capric Triglyceride	5.00
PHASE C		
Avocado Oil	Persea Grratissima (Avocado) Oil	2.50
Shea Butter	Butyrospermum Parkii (Shea Butter) Fruit	2.00
Olivatis 18 ^{1,3}	Olive Oil Polyglyceryl-6 (and) Sodium Stearoly Lactylate (and) Cetearyl Alcohol	5.00
PHASE D		
Biosecur C160S ^{1,4}	Citrus Extract	2.00
PHASE E		
Essential Oil Blend		q.s.

Procedure

Phase A: Mix Phase A with propeller mixing; heat mixture to 104 °F (40 °C). Add Sodium-Coco Sulfate. Continue to heat and mix until 158°F (70 °C). Phase B: In side vessel, mix Phase B into a thick paste. Add to Phase A at 122 °F (50 °C) when the Sodium-Coco Sulfate is uniform and homogeneous. Once Phase AB is homogeneous, hold at temperature. Phase C: In side vessel weigh and mix Phase C until homogeneous. Once Phase AB and Phase C are at temperature, add Phase C to Phase AB with increased speed on prop mixing (700 rpm) for 1 to 2 minutes. Transfer to homogenizer and mix at 2,500 to 3,000 RPM for 1 to 2 minutes. Mixture should turn into a light yellow color. Discontinue aggressive mixing and cool with stirring prop to 104 °F (40 °C). Phase D: Add the preservative in Phase D. Phase E: Add essential oil blend (optional). Cool to 30 °C then transfer to holding vessel.

Suppliers

¹Coast Southwest, Inc., ²CrossChem, ³Medolla Limited, ⁴Sharon Laboratories Ltd

Properties

pH: 6.5

Viscosity: spindle 4 @ 60 rpm = 1,913 cst.

Formulation provided by:



FACE MASK TREATMENT

This 10-minute mask delivers glycolic acid and moisturizes with a cooling sensation.

PHASE A	INCI NAME	% (w/w)
Deionized Water	Aquan	61.90
Dissolvine® 220-\$1,2	Tetrasodium EDTA	0.20
Sorbitol 70%	Sorbitol	8.00
GlyAcid® 70 HP ^{1,3}	Glycolic Acid (and) Aqua	1.40
PHASE B		
Ultrastarch P212C ^{1,4}	ZEA Mays (Corn) Starch	10.00
Pelavie® Pink Clay ^{1,5}	Bentonite	10.00
PHASE C		
Hydrasoft® Sea ^{1,2}	Water (and) Algae Extract (and) Natto Gum (and) Phenoxyethanol (and) Chiorphenesin (and) Citric Acid	4.00
Creagel® Crystal HPB ^{1,5}	Hydrogenated Polylsobutene (and) Ethylene/Propylene Copolymer	1.00
PHASE D		
Sharomix 705 ^{1,6}	Benzoic (and) Sorbic Acid (and) Dehydroacetic Acid (and) Benzyl Alcohol	1.00
PHASE E		
Endicare® ETP-3051	Polyacrylamide (and) C13-14 soparafiin (and) Laureth-7	2.25

Procedure

Phase A: In main vessel, add Phase A; mix and heat to 122 °F (50 °C) and hold. Phase B: In side vessel, combine Phase B and then add slowly to Phase A. Increase speed as needed so powder is wetted out and dispersed; batch will thicken. Phase C: In side vessel, blend Phase C and add to Phase AB. Once uniform, begin cooling to 104-113 °F (40-45 °C) with slow prop or sweep. Phase D: At 104-113 °F (40-45 °C) add Phase D to Phase ABC, continue cooling to 77-86 °F (25-30 °C). Phase E: Add Phase E to Phase ABCD. Initially batch will be discontinuous. Continue mixing and the batch will become uniform. Stop when the batch is thick and homogeneous.

Suppliers

¹Coast Southwest, Inc., ²Akzo Nobel Functional Chemicals LLC, ³CrossChem, ⁴Ultra Chemical, Inc., ⁵The Innovation Company⁸, ⁴Sharon Laboratories Ltd.

Properties

pH: 3.73

Viscosity: spindle 5 @ 0.5 rpm = 692,000 cst.

Formulation provided by:



PORE REFINING WIPE

Pore refining wipe cleanses the skin and helps tighten pores. It is wonderful for oily skin. It will remove impurities without overly drying the skin.

PHASE A	INCI NAME	% (w/w)
Deionized Water	Aqua	62.15
Dissolvine® GL-47-\$1.2	Tetrasodium Glutamate Diacetate	0.10
3V Allantoin ^{1,3}	Allantoin	0.05
Glycerin ¹	Glycerin	5.00
PHASE B		
Enditeric® COAB	Cocamidopropyl Betaine	8.00
Sopalteric CBS ^{1,4}	Cocamidopropyl Hydroxysultaine	8.00
Endisil® FS-1931	PEG-12 Dimethicone	1.50
Polysorbate 201	Polysorbate 20	3.00
GlyAcid® 70 HP1.5	Glycolic Acid (and) Aqua	2.00
PHASE C		
Canasol R 4000 H ^{1,6}	PEG-40 Hydrogenated Castor Oil	1.00
Cayoma® Olive ^{1,7}	Aqua (and) Olea Europaea Leaf Extract (and) Alcohol (and) Maltodextrin (and) Olea Europaea Extract	0.20
PHASE D		
Sharomix 703 ^{1.8}	Benzyl Alcohol (and) Potassium Sorbate (and) Sodium Benzoate (and) Water	1.00
PHASE E		
Olivatis™ 15¹.9	Olive Oil Glycereth-8 Esters	8.00
NaOH 0.5N	Sodium Hydroxide	q.s.

Procedure

Phase A: Add Phase A in order until homogeneous. Phase B: Add Phase B in order to Phase A until homogeneous. Phase C: Pre-mix Phase C and add to Phase AB. Note: Allot time for ingredients to get into solution. Phase D: Add Phase D and Phase ABC and check pH. Phase E: Neutralize Phase ABCD with NaOH 0.5N to pH of 4.0 before adding Olivatis™ 15 with continuous mixing. Transfer to a holding vessel once uniform.

Suppliers

¹Coast Southwest, Inc., ²Akzo Nobel Functional Chemicals LLC, 33V Sigma- USA, 4Southern Chemicals & Textiles, 5CrossChem, 6Oxiteno, 7The Innovation Company®, 8Sharon Laboratories Ltd., ⁹Medolla Limited

Properties

pH: 4.01

Viscosity: spindle 2 @ 100 rpm = <100.00 cst.

Formulation provided by:



2 IN 1 FACIAL MASK FOR OILY SKIN

This 2 in 1 facial mask makes the pores finer and renews the cells with GlyAcid® 70 HP. BergaSom Soy 50 and BergaCare SB give extra care and a luxurious appearance. Despite the many care ingredients, BergaCare FG 5 makes the mask feel light on the skin, while BergaMuls ET 1 provides a silky feeling.

PHASE A	INCI Name	% (w/w)
Demineralized Water	Aqua	≤ 100.00
Glycerin 99.5%	Glycerin	6.00
Xanthan Gum	Xanthan Gum	0.50
PHASE B		
BergaCare SB ¹	Butyrospermum Parkii Butter	2.00
BergaBest MCT 60/401	Caprylic/Capric Triglyceride	4.00
BergaCare FG 5 ¹	Ethylhexyl Palmitate (and) Ethylhexyl Stearate (and) Hydrogenated Olive Oil Unsaponifiables (and) Caprylic/Capric Triglyceride	4.00
BergaMuls ET 1 ¹	B-Glucan (and) Pectin	3.00
Behenyl Alcohol	Behenyl Alcohol	4.00
Bergazid C1499 ¹	Myristic Acid	2.00
PHASE C		
Glycerin 99.5%	Glycerin	10.00
BergaSom Soy 50¹	Lecithin	0.20
PHASE D		
Kaolin	Kaolin	10.00
PHASE E		
GlyAcid® 70 HP ²	Glycolic Acid (and) Aqua	Adjust pH ~4
Preservative / Fragrance		q.s.

Procedure

Weigh **Phase A** and heat to 75 °C while stirring. Proceed likewise with **Phase B** but without BergaMuls ET 1, heat to 75 °C and then add BergaMuls ET while stirring. Add Phase B to Phase A while stirring and homogenize 30 seconds. Separately, weigh **Phase C** and dissolve while stirring. Cool down to 40 °C while mixing and add Phase D. Adjust the pH with GlyAcid® 70 HP (pH 4) and add preservative.

Suppliers

¹Berg + Schmidt, ²CrossChem distributed by Berg + Schmidt

Properties

pH: 4

Viscosity: (24H) = n.a. Internal Ref: GM-004-BSC

Formulation provided by:



PURIFYING GENTLE FOAM WASH WITH GLYACID®

This Face Wash does not only cleanse the skin with the mild surfactant **BergaSoft DG 50**, it also contains a high concentration of **GlyAcid® 70 HP** which can stimulate the skin's cell turnover, leading to a smoother, more radiant skin. **BergaSom Sun 50** serves as an active ingredient, mimicking the skin's own lipids for an improved skin condition.

PHASE A	INCI Name	% (w/w)
Demineralized Water	Aqua	≤ 100.00
BergaSoft DG 501	Decyl Glucoside	3.00
Glycerin 99.5%	Glycerin	1.00
1.3-Butylene Glycol	Butylene Glycol	1.00
Polysorbate-60	Polysorbate-60	0.20
BergaSom Sun 50¹	Lecithin	0.10
D-Panthenol	Panthenol	0.50
PHASE B		
GlyAcid® 70 HP2	Glycolic Acid (and) Aqua	20.00
NaOH solution (25%)	Sodium Hydroxide	13.50
PHASE C		
Preservative/fragrance		q.s.

Procedure

Weigh and dissolve all raw materials from **Phase A**. Separately weigh and mix **Phase B** and add to A while stirring. Adjust pH and add the **Phase C** preservative.

Suppliers

¹Berg + Schmidt, ²CrossChem distributed by Berg + Schmidt

Properties

Note: For optimal effectiveness of GlyAcid®, we recommend working with a pH between 3.8 and 4.3

pH: 3.8

Viscosity: (24H) = n.a. Internal Ref: WS-010-BSC

Formulation provided by:



FOAMING FACIAL CLEANSER

GlyAcid® 70 HP in this foaming facial cleanser makes the pores finer while **BergaSoft DG 50** provides very mild cleansing. It is ideal for preparing the skin to absorb the active ingredients in subsequent care products.

PHASE A	INCI Name	% (w/w)
Demineralized Water	Aqua	≤ 100.00
BergaSoft DG 501	Decyl Glucoside	2.00
GlyAcid® 70 HP ²	Glycolic Acid and water	2.00
Sodium Laureth Sulfate 70%	Sodium Laureth Sulfate	1.00
Butylene Glycol 1.3	Butylene Glycol 1.3	1.00
Sorbitol 70%	Sorbitol	1.00
Sodium Cocoamphoacetate	Sodium Cocoamphoacetate	0.30
D-Panthenol	Panthenol	0.50
Allantoin	Allantoin	0.20
Polysorbate 60	Polysorbate 60	0.20
Sodium Hydroxide	Sodium Hydroxide	Adjust pH ~4
Menthol	Menthol	0.10

PHASE B

Preservative / Fragrance	-	q.s.
Preservative / Pragrance	-	- q.

Procedure

Weigh all **Phase A** raw materials and stir without heating. Add **Phase B** preservative and fragrance

Suppliers

¹Berg + Schmidt, ²CrossChem distributed by Berg + Schmidt

Properties

pH: 4.0

Viscosity: (24H) = n.a. Internal Ref: WS-007-BSC

Formulation provided by:



VITALIZING NIGHT PEELING CREAM

GlyAcid® 70 HP stimulates cell turnover, smooths the skin and refines the skin texture overnight for a dazzling result the next morning.

PHASE A	INCI Name	% (w/w)
BergaBest GS SE ¹	Glyceryl Stearate	3.50
Cetearyl Alcohol	Cetearyl Alcohol	2.00
Carbopol Ultrez 30 ³	Carbomer	1.00
Ceteareth 20	Ceteareth 20	1.00
MicroCare M8100	Caprylyl Methicone	4.00
Cyclopentasiloxane (and) Di- methicone / Vinyl Dimethicone Crosspolymer	Cyclopentasiloxane (and) Dimethicone / Vinyl Dimethicone Crosspolymer	5.00
Dimethicone	Dimethicone	5.00
PHASE B		
Demineralized Water	Aqua	≤ 100.00
Glycerin	Glycerin	1.00
Pentylene Glycol	Pentylene Glycol	2.00
PHASE C		
GlyAcid® 70 HP ²	Glycolic Acid (and) Water	10.70
NaOH	Sodium Hydroxide	adjust pH
PHASE D		
Preservative / Fragrance		q.s.

Procedure

Weigh **Phase A** and **Phase B** and heat to $75\,^{\circ}$ C. Add Phase B to Phase A under stirring, homogenize. Adjust pH of **Phase C** as desired. When temperature reached 40 $^{\circ}$ C, slowly add **Phase C**. Add **Phase D**.

Suppliers

¹Berg + Schmidt, ²CrossChem distributed by Berg + Schmidt,

Properties

pH: 4,0

Viscosity: (24H) = 15000 Cps Stability under progress Internal Ref: RPO G022

Formulation provided by:



MOISTURIZING AFTER SHAVE LOTION

This refreshing after shave contains **GlyAcid® 70 HP** to prevent the formation of ingrown hair after shaving and to stimulate skin cell renewal. **BergaCare FG 5** contributes to a silky and light skin feeling.

PHASE A	INCI Name	% (w/w)
Demineralized Water	Aqua	Up To 100%
Glycerin	Glycerin	4.0
Menthol	Menthol	0.1
Xanthan Gum	Xanthan Gum	0.3
Carbopol Ultrez 20 ³	Acrylates/C10-30 Alkyl Acrylate Crosspolymer	0.5
PHASE B		
BergaCare FG 5 ¹	Ethylhexyl Palmitate (and) Ethylhexyl Stearate (and) Hydrogenated Olive Oil Unsaponifiables (and) Caprylic Capric Triglyceride	4.0
SternOil HCO 40 ¹	PEG-40 Hydrogenated Castor Oil	2.0
BergaBest GS SE ¹	Glyceryl Stearate SE	2.0
PHASE C		
GlyAcid® 70 HP ²	Glycolic Acid (and) Aqua	4.0
Demineralized Water	Aqua	10.0
PHASE D		
NaOH	Sodium Hydroxide	adjust pH
PHASE E		
Ethanol	Alcohol Denat.	3.0
Preservative/Fragrance	-	q.s.%

Procedure

Weigh water and Glycerin, start mixer and add all other raw materials from **Phase A**. Weigh all raw materials from **Phase B** and heat both phases up to ~70 °C. Add Phase B to A while stirring and homogenize 30 seconds. Mix **Phase C** and add while stirring. Cool down to 40 °C, adjust pH with **Phase D**. Add **Phase E** preservative and Ethanol.

Suppliers

¹Berg + Schmidt, ²CrossChem distributed by Berg + Schmidt, ³Lubrizol

Properties

Note: For optimal effectiveness of GlyAcid®, we recommend working with a pH between 3.8 and 4.3

pH: 4.2

Internal Ref: After Shave-003-BSC

Formulation provided by:



For more information, contact **berg-schmidt.de**

LIGHT CARING ANTI-ACNE CREAM

This Anti-Acne Cream contains a high and particularly effective concentration of **GlyAcid®** which stimulates the cell renewal process and smooths acne-induced scars. **BergaCare SB** and **BergaCare FG 5** provide care to the skin. **BergaMuls ET 1**, a blend of several natural plant fibers, stabilizes the cream while allowing an emulsifier-free declaration.

PHASE A	INCI Name	% (w/w)
Demineralized Water	Aqua	≤ 100.00
Propylene Glycol	Propylene Glycol	2.00
Xanthan Gum	Xanthan Gum	0.50
PHASE B		
BergaBest MCT 60/40	Caprylic/Capric Triglyceride	3.00
BergaCare FG 5 ¹	Ethylhexyl Palmitate (and) Ethylhexyl Stearate (and) Hydrogenated Olive Oil Unsaponifiables (and) Caprylic Capric Triglyceride	3.00
BergaSom Sun 50 ¹	Lecithin	0.20
Stearyl Alcohol	Stearyl Alcohol	2.00
Bergazid 9818 ¹	Stearic Acid	2.00
Cetearyl Alcohol	Cetearyl Alcohol	3.00
Cetyl Alcohol	Cetyl Alcohol	1.00
BergaCare SB ¹	Butyrospermum Parkii (Shea) Butter	2.00
BergaMuls ET 1 ¹	Beta-Glucan (and) Pectin	2.00
Squalane	Squalane	1.50
PHASE C		
GlyAcid® 70 HP ²	Glycolic Acid (and) Water	15.00
Demineralized Water	Aqua	10.00
NaOH	Sodium Hydroxide	adjust pH
PHASE D		
D-Panthenol	Panthenol	1.00
Preservative/Fragrance	-	q.s.

Procedure

Weigh water and Propylene Glycol, start mixer and add Xanthan Gum. Weigh all raw materials from **Phase B** except BergaMuls ET 1, heat both phases up to ~70 °C. As Phase B has melted, disperse BergaMuls ET 1 under gentle stirring, Add Phase B to A while stirring and homogenize for 30 seconds. Add **Phase C** and then **Phase D**.

Suppliers

¹Berg + Schmidt, ²CrossChem distributed by Berg + Schmidt

Properties

Note: For optimal effectiveness of GlyAcid®, we recommend working with a pH between 3.8 and 4.3

pH: 3.8

viscosity: (24H) = 5 800 Internal Ref: AA-004-BSC

Formulation provided by:



For more information, contact **berg-schmidt.de**

LE CRÈME MOISTURIZER

COSMOS approved Ecogel delivers a gel-cream texture with GlyAcid® and compatible with electrolytes.

PHASE A	INCI NAME	% (w/w)
Deionized Water	Aqua	73.45
1,2-Hexanediol¹	1,2-Hexanediol	2.00
Disodium EDTA ¹	Disodium EDTA	0.10
Ecogel ¹	Lysolecithin, Sclerotium Gum, Xanthan Gum, Pullulan	1.50
Liponic EG-1 ¹	Glycereth-26	3.00
PHASE B		
Lipocol SC 1618S ¹	Cetearyl alcohol	1.00
Dub GMS ¹	Glyceryl stearate	0.70
Lipomulse 165 ¹	Glyceryl Stearate, PEG-100 Stearate	2.00
Lipo \$\$¹	Hydrogenated Vegetable Oil	2.00
Lipovol MOS-701	Tridecyl Stearate (and) Neopentyl Glycol Dicaprylate/ Dicaprate (and) Tridecyl Trimellitate	
Liponate SPS ¹	Cetyl Esters	0.75
Liponate MM¹	Myristyl Myristate	0.50
SF1000N (6cst) ¹	Dimethicone	2.00
PHASE C		
GlyAcid® 70 HP ^{1,2}	Glycolic Acid (and) Aqua	4.00
PHASE D		
NaOH 25% ¹	Sodium Hydroxide	q.s.

Procedure

Phase A: In the main kettle, combine ingredients using a lightning mixer and heat to 78 °C to 80 °C. Mix until clear and uniform during 20 minutes. **Phase B:** Heat Phase B to 80 °C and mix well. Slowly add Phase B to batch with medium to high speed propeller mixing. **Phase C:** At 45 - 50 °C, add Phase C to batch with propeller mixing. **Phase D:** Cool to 25 °C and adjust pH to 3.8 – 4.2.

Suppliers

¹**SEIL International**, ²**CrossChem**, distributed by SEIL International

Properties

pH: 3.8 - 4.2

Viscosity: spindle 6 @ 20 rpm = 3000- 5000cps

Formulation provided by:



For more information, contact seilint.com

ILLUMINATING COCONUT CREAM CLEANSER

Brighten your day and your skin with this creamy cleanser formula. **Endinol® MILD B-SF65**, a mild, vegetable-derived surfactant blend, is free of sulfates and provides exceptional foaming and feel. **Coconut Oil** hydrates and moisturizes the skin, while **Rosehip Oil** repairs damaged skin and evens out skin tone. **GlyAcid® 70 HP** provides gentle exfoliation to reveal an instantly brighter-looking complexion.

PHASE A	INCI NAME	% (w/w)
Deionized Water	Aqua	55.33
Endiquest® GLDA ¹	Tetrasodium Glutamate Diacetate	0.15
Endinol® MILD B-SF65¹	Sodium Cocoyl Isethionate (and) Cocamidopropyl Hydroxysultaine (and) Lauryl Glucoside (and) Cocami- dopropylamine Oxide (and) Caprylyl/Capryl Glucoside	24.00
PHASE B		
Rosehip Oil ^{1,2}	Rosa Canina Fruit Oil	3.00
Coconut Oil ^{1,2}	Cocos Nucifera (Coconut) Oil	4.00
Stearic Acid ¹	Stearic Acid	4.00
Endimulse® EGMS1	Glycol Stearate	3.00
Myristic Acid ¹	Myristic Acid	0.80
Palmitic Acid ¹	Palmitic Acid	1.50
PHASE C		
NaOH 40% w/w Solution	Sodium Hydroxide	0.80
PHASE D		
SharoSENSE™ Plus 181 ^{1,3}	Maltol (and) Polyquaternium-80	0.70
PHASE E		
GlyAcid® 70 HP ^{1,4}	Glycolic Acid (and) Aqua	1.70
NaOH 40% w/w Solution	Sodium Hydroxide	1.02

Procedure

Phase A: Add Phase A ingredients in formula order to the main vessel with shear mixing and begin heating to 158-167°F (70-75°C). Mix until fully uniform. Phase B: In a separate vessel, add Phase B ingredients in formula order with propeller mixing and begin heating to 158-167°F (70-75°C). Once at desired temperature and fully uniform, add Phase B to Phase A under shear mixing. Mix until fully uniform and dispersed. Phase C: Add Phase C to Phase AB with shear mixing. Begin cool down. Phase D: When main vessel is at 122-140°F (50-60°C), add Phase D with shear mixing. Mix until fully dispersed and uniform. Phase E: In a separate vessel, combine Phase E ingredients with continuous mixing. Note: Reaction is exothermic. Allow time for neutralization above pH 4.2. Once main vessel is below 104°F (40°C), add Phase E with shear mixing. Transfer to final container when batch is fully uniform and at room temperature.

Suppliers

¹Coast Southwest, Inc., ²International Cosmetic Science Centre (ICSC), ³Sharon Laboratories Ltd., ⁴CrossChem

Properties

pH: 6.0 - 6.5

Viscosity: spindle 4 @ 5.0 rpm = 9,000 to 13,000 cst.

Formulation provided by:



SINGLE-SWEEP SMOOTHING AND DETOXIFYING GEL

This refreshing, detoxifying cream is rich in nutrients and moisturizers to soothe dry and irritated skin. **GlyAcid® 70 HP**, and alpha-hydroxy acid, provides gentle exfoliation to reveal an instantly brighter-looking complexion. **Olivatis® 21**, a natural-derived O/W emulsifier, improves smoothness. In a single-sweep, take your skin from dull and lackluster to refreshed and glowing.

PHASE A	INCI NAME	% (w/w)
Deionized Water	Aqua	55.33
Glycerin 99.7% USP Kosher ¹	Glycerin	1.20
Endicare® DLP-501	Panthenol	0.80
Medxtract Witch Hazel Distilled Organic ^{1,2}	HamamelisVirginiana (Witch Hazel) Leaf Water	
EASYGEL SOL ^{1,3}	Carbomer	0.50
PHASE B		
Endimate® 32V1	Caprylic/Capric Triglyceride	5.25
Olivatis 21 ^{1,2}	Olive Oil PEG-6 Esters (and) Olive Oil Polyglyceryl-6 Esters	4.00
Endipure® Sweet Almond¹	Prunus Amygdalus Dulcis (Sweet Almond) Oil	5.25
PHASE C		
NaOH 10% w/w Solution	Sodium Hydroxide	0.80
PHASE D		
GlyAcid® 70 HP1.4	Glycolic Acid (and) Aqua	1.70
PHASE E		
Sharomix® 702 ^{1,5}	Dehydroacetic Acid (and) Benzoic Acid (and) Phenoxyethanol	0.70
Fragrance		q.s.

Procedure

Phase A: Combine Phase A in main vessel under shear mixing. Note: Disperse polymer slowly. Phase B: Combine Phase B ingredients in separate vessel with continuous mixing. Once uniform, add Phase B to main vessel under shear mixing. Phase C: Add Phase C to main vessel under shear mixing. Phase D: Add Phase D to main vessel under shear mixing. Phase D: Add Phase D to main vessel under shear mixing. Further adjust pH to within range, if necessary. Phase E: Add Phase E to main under continuous mixing. Once uniform, transfer to final container.

Suppliers

¹Coast Southwest, Inc., ²Medolla Limited, ³3V Sigma-USA, ⁴CrossChem LP, ⁵Sharon Laboratories Ltd

Properties

pH: 5.5 - 6.0

Viscosity: spindle 4 @ 30 rpm = 4,000 to 5,000 cst.

Internal Ref: CSW 009-07

Formulation provided by:



GLYACID® PRO PEEL

GlyAcid® 70 HP helps dissolve dead skin cells on the surface, providing superficial exfoliation. **Healerine®**, from reishi mushroom fermentation, helps skin integrity and continuity and increases optimum moisturizing levels. *This formula* should only be used by professionals. When applying, avoid the eye area and wear sunscreen

PHASE A	INCI NAME	% (w/w)
GlyAcid® 70 HP1,2	Glycolic Acid (and) Aqua	40.00
NaOH 30% w/w Solution	Sodium Hydroxide	39.55
PHASE B		
Deionized Water	Aqua	18.05
PHASE C		
Sharomix 702 ^{1,3}	Dehydroacetic Acid (and) Benzoic Acid (and) Phenoxyethanol	0.70
Propanediol	Propanediol	0.70
PHASE D		
Hearline ^{1,4}	Aqua (and) Ganoderma Lucidum Extract (and) Propanediol (and) Xantan Gum	1.00
PHASE E		
NaOH 30% w/w Solution	Sodium Hydroxide	q.s.

Procedure

Phase A: With proper personal protective equipment (PPE), add Glyacid® 70 HP to main vessel. Slowly neutralize with Sodium Hydroxide 30% solution to pH 4.2 to 5.50. The reaction will be exothermic and generate heat. An ice bath may be used. **Phase B:** Add Phase B to Phase A. **Phase C:** Premix Phase C and add to Phase AB when temperature is below 50 °C. **Phase D:** Add Phase D to Phase ABC. **Phase E:** If needed, adjust the final pH to 4.2 to 5.0 with Sodium Hydroxide 30% solution.

Suppliers

¹Coast Southwest, Inc., ²CrossChem LP, ⁵Sharon Laboratories Ltd. ⁴Naturethic

Properties

pH: 4.2 - 5.0

Viscosity: N/A

Internal Ref: CSW 012-042

Formulation provided by:



PEARLY WHIPPED CLEANSER

This conditioning cleanser is rich in palm-derived ingredients. Its whipped texture and pearl-like sheen add to the cleaning experience. **Endinol® SCS** is an anionic natural surfactant derived from coconut oil that can impart mild conditioning. **GlyAcid® 70 HP** provides mild, face-friendly exfoliation.

PHASE A	INCI NAME	% (w/w)
Deionized Water	Aqua	65.75
GlyAcid® 70 HP1.2	Glycolic Acid (and) Aqua	3.00
Triethanolamine 99%	Triethanolamine	q.s.
Allantoin ^{1,3}	Allantoin	1.00
Glycerin 99.7% USP ¹	Glycerin	6.00
Endinol® SCS ¹	Sodium Coco-Sulfate	4.50
PHASE B		
Stearic Acid ¹	Stearic Acid	7.00
Palmitic Acid ¹	Palmitic Acid	6.00
Myristic Acid ¹	Myristic Acid	3.00
Cetyl Stearyl Alcohol ¹	Cetyl Stearyl Alcohol	0.50
Vitamin E Acetate ¹	Tocopheryl Acetate	2.00
PHASE C		
Triethanolamine 99%	Triethanolamine	q.s.
PHASE D		
Endicare® PQ-111	Polyquaterium-11	0.75
Phenoxyethanol	Phenoxyethanol	0.50

Procedure

Phase A: Add water to main vessel and begin heating to 70-75°C. At 40-50°C with moderate mixing, add GlyAcid® 70. HP followed by Triethanolamine 99% to pH 4.00 to 4.50. Continue heating, add remaining portion of Phase A. Phase B: In separate side of vessel heat Phase B to 70-75 oC until a uniform solution is formed. At 70-75°C, add Phase B to Phase A with homogenizing for 1 to 2 minutes. Combine to phases until uniform. Phase C: Add Phase C slowly to Phase AB to the desire pH, then begin to cool with slow sweep or propeller mixing. Phase D: At 40°C, premix Phase D and add mixture to Phase ABC. Cool to 25°C, then transfer to final vessel.

Suppliers

¹Coast Southwest, Inc., ²CrossChem LP, ³3V Sigma-USA

Properties

pH: 4.0 - 4.5

Viscosity: Spindle 5 @ 20.0 rpm = 8,000 to 11,000 cst

Internel Ref: CSW 12-030D

Formulation provided by:



GO-TO GLYACID® TONER

Enhance your daily beauty routine with this gentle toner that exfoliates and works against logged pores and blemished. CrossChem's high-purity GlyAcid® 70 HP is designed specifically for today's personal care formulations. EndiMoist® HA Solution has been known to assist in skin moisturization, scavenge free radicals, and impart anti-inflammatory and anti-inritation properties. Endicare® C is a high-purity and stable vitamin C derivative with anti-oxidant, anti-inflammatory and collagen-building activity. When applying toner, avoid eye area. Sunscreen must be worn after use.

PHASE A	INCI NAME	% (w/w)
Deionized Water	Aqua	65.75
Endiquest® GLDA¹	Tetrasodium Glutamate Diacetate	0.10
Glycerin 99.7% USP ¹	Glycerin	1.00
PEG 400 NF ¹	PEG-8	5.00
PHASE B		
GlyAcid® 70 HP1.3	Glycolic Acid (and) Aqua	5.00
Sodium Hydroxide (30%) w/w	Sodium Hydroxide	q.s.
PHASE C		
Sharomix 702 ^{1,3}	Dehydroacetic Acid (and) Benzoic Acid (and) Phenoxyethanol	0.70
EndiMoist® HA Solution ¹	Sodium Hyaluronate	0.50
Endicare® C	Sodium Ascorbyl Phosphate	1.00

Procedure

Phase A: Add water to main vessel and begin heating to 70-75°C. With moderate mixing, add remaining portion of Phase A. Phase B: With proper personal protective equipment (PPE), add GlyAcid® 70 HP to side vessel. Slowly neutralize the GlyAcid® 70 HP with Sodium Hydroxide 30% solution to pH 4.50 to 5.50. the reaction will be exothermic and generate heat. An ice bath may be used. Add Phase B to Phase A. Once AB is at 70-75°C, discontinue heat. Phase C: At 40-50°C add Phase C to Phase AB and mix until dissolved.

Suppliers

¹Coast Southwest, Inc., ²CrossChem LP, ³Sharon Laboratories Ltd

Properties

pH: 4.5 - 5.5

Viscosity: N/A

Internel Ref: CSW 12-039B

Formulation provided by:



Nail Care

'WE CARE FOR CUTICLE' TREATMENT

GlyAcid® 70 HP gently smooths the sensitive cuticle and nail bed for healthy-looking nails. **BergaCare FG Olive** provides a non-greasy and non-tacky finish. **BergaCare SB** nourishes and softens the skin.

PHASE A	INCI Name	% (w/w)
Demineralized Water	Aqua	≤ 100.00
Glycerin	Glycerin	3.00
Polyglyceryl-10 Laurate	Polyglyceryl-10 Laurate (and) Aqua (and) Citric Acid	2.00
Aloe Vera Powder	Aloe Barbadensis Leaf Juice Powder	0.20
Caffeine	Caffeine	0.20
Xanthan Gum	Xanthan Gum	0.20
PHASE B		
BergaCare FG Olive ¹	Hydrogenated Ethylhexyl Olivate (and) Hydrogenated Olive Oil Unsaponifiables	2.00
BergaCare SB ¹	Betyrospermum Parkii (Shea) Butter	2.00
Jojaba Oil	Simmondsia Chinesis (Jojoba) Seed Oil	2.00
PHASE C		
GlyAcid® 70 HP ²	Glycolic Acid (and) Water	1.50
NaOH (25% Solution)	Sodium Hydroxide	1.50
PHASE D		
Ethanol	Alcohol Denat.	3.00
PHASE E		
Preservaive/Fragrance		q.s.

Procedure

Phase A: Weigh water and glycerin, start stirrer and add other phase A materials while stirring. **Phase B:** Weigh all materials of phase B without Shea Butter and heat both up to ~75 °C. When the oil phase has melted, add Shea Butter and melt as well. Add **Phase B to Phase A** while stirring to homogenize for 30 seconds. **Phase C:** Mix phase C and add while stirring. **Phase D:** Cool down to 40 °C, then add phase D, adjust pH to desired value and preserve.

Suppliers

Berg+Schmidt, 2CrossChem

Properties

pH: For optimal effectiveness of GlyAcid® a pH between 3.8 and 4.3 is recommended.

Formulation provided by:



For more information, contact **berg-schmidt.de**

GLYAICD® WITH OLUS OIL FOR NAILS

An example of thinking outside the box. We present you with a nail care formulation infusing **GlyAcid®** with Olus Oil that reduces the cuticle while facilitating nail uniformity.

INCI Name	% (w/w)
Olus Oil	36.15
Pentaerythrityl Tetra-de-t-butyl Hydroxyhydrocinnamate	0.05
Tocopheryl Acetate	4.00
Octyldodecyl Oleate (and) Tocopheryl Acetate	40.00
PEG-40 Hydrogenated Castor Oil	10.00
Glicerin	3.00
Glycolic Acid	5.00
Phenoxyethanol (and) Ethylhexyglycerin	0.80
	1.00
	Olus Oil Pentaerythrityl Tetra-de-t-butyl Hydroxyhydrocinnamate Tocopheryl Acetate Octyldodecyl Oleate (and) Tocopheryl Acetate PEG-40 Hydrogenated Castor Oil Glicerin Glycolic Acid

Procedure

Phase A: In main vessel, add Phase A. Mix with heat until antioxidant is dissolved. **Phase B:** Mix ingredients in separate vessel and add to Phase A. Adjust pH to 2.5 - 3.5 and add fragrance.

Suppliers

^{1,3}Gustav Heess, ²Sandream, ⁴CrossChem, ⁵Kolon

Properties

pH: 2.5 3.5

Formulation provided by:



For more information, contact **lookchemicals.com**

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