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DISCOVER A **BETTER** WAY™

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# LOVE IS IN THE HAIR

HAIR CARE KIT

DISCOVER A **BETTER** WAY™

You and your hair – it's a passionate love affair that can last a lifetime. And, while even the liveliest curls and sleekest styles may start from the same humble beginnings, finding the right hair care routine is much more than a squirt of shampoo and a few drops of conditioner.

Love Is in the Hair is a one-of-a-kind hair care kit specifically developed to capture the allure and excitement of finding the perfect product that makes you and your hair feel like a match made in heaven.

DISCOVER A **BETTER WAY™** for your hair care, colorant and styling formulations with ANGUS.

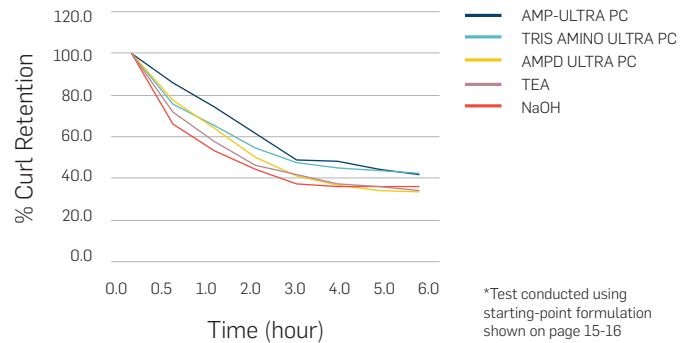
From tonics and gels to colorants and cremes, today's hair-care formulations are constantly evolving with high-intensity innovation and ever-changing consumer preferences. For formulators, the challenge of working with new ingredients and platforms to deliver the desired features and benefits is real.

With decades of proven effectiveness, ANGUS' high-purity ULTRA PC™ multifunctional amino alcohols deliver robust performance across a broad array of hair care, colorant and styling applications. Discover the timeless, in-formulation versatility, efficiency and stability of AMP-ULTRA™ PC (INCI: Aminomethyl Propanol), TRIS AMINO™ ULTRA PC (INCI: Tromethamine) and DMAMP™ ULTRA PC (INCI: Dimethylamino Methylpropanol) amino alcohols.

- Outstanding high-humidity curl retention (HHCR)
- Improves washability and elasticity of resins
- In-can corrosion resistance for aerosol sprays
- Enables pristine whiteness in waxes
- Creates long-lasting color/wash-fastness with lower odor than ammonia
- Improves color stability and clarity of gels
- Provides best-in-class compatibility with commonly used resin and propellant systems
- More favorable health and environmental profile compared to MEA, TEA and ammonia

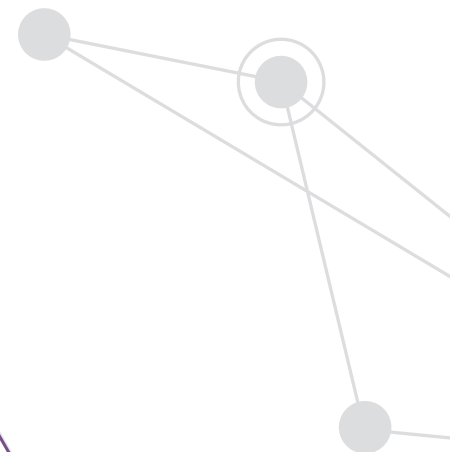
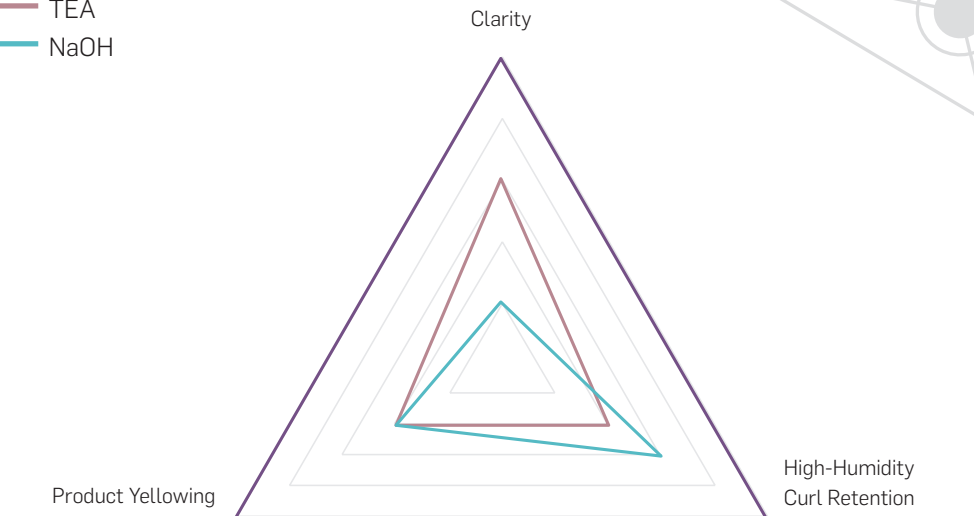
The synergistic effects of ANGUS amino alcohols with hair fixative resins are “clear” when examining high-humidity curl retention. A significant boost to curl retention is observed using AMP-ULTRA™ PC 2000 in hair gels. After one hour in a high-humidity environment (95% rel. humidity), the AMP product retained >70% of its initial curl while TEA was ~50% retention.

### High-humidity Curl Retention (HHCR) Test\*



### Hair Fixative Properties

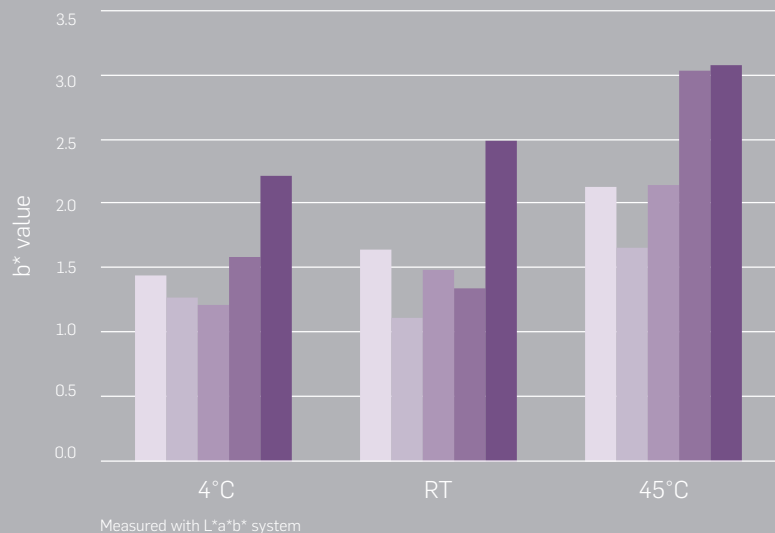
- AMP-ULTRA™ PC 2000
- TEA
- NaOH



Color stability is important for prolonged shelf-life of products. ANGUS' ULTRA PC products are chemically less prone to oxidative pathways that lead to yellowing of final products.

### Color Stability in Hair Gels Measured Over 3 Months

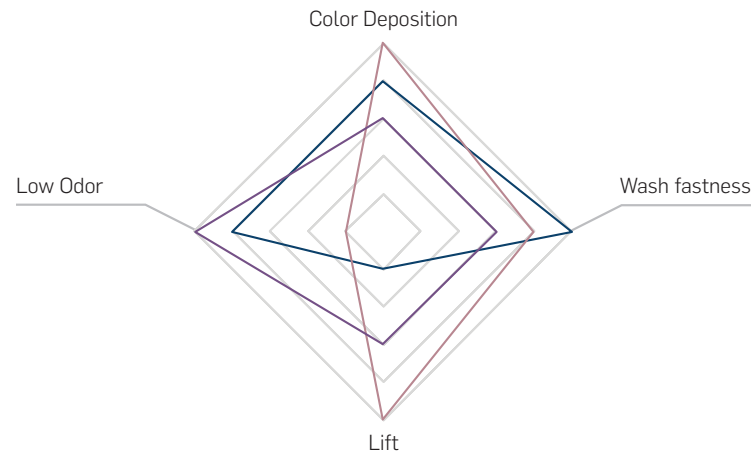
- AMP-ULTRA™ PC 2000
- TRIS AMINO™ ULTRA PC
- AMPD ULTRA PC™
- TEA
- NaOH



New to the ANGUS personal care portfolio, DMAMP™ ULTRA PC provides superior color deposition and wash fastness not previously attainable with low-odor alkalizers. With exceptional gray coverage, and long-lasting color (even in red shades), DMAMP ULTRA PC provides color formulators with a new, alternative alkalizer for their formulations.

### Hair Color Properties

- DMAMP™ ULTRA PC
- NH3
- MEA





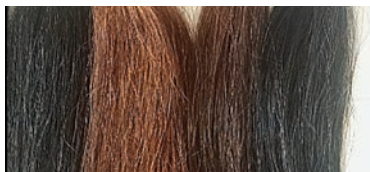
### Wash Fastness of Black Shades

AMMONIA MEA AMP™ DMAMP™



After color treatment  
(no washes)

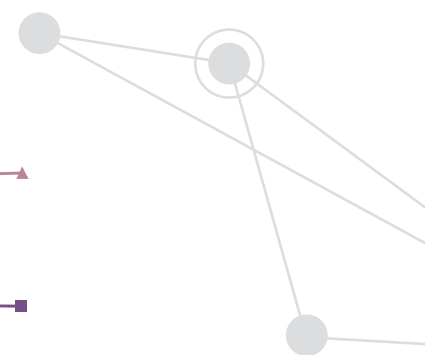
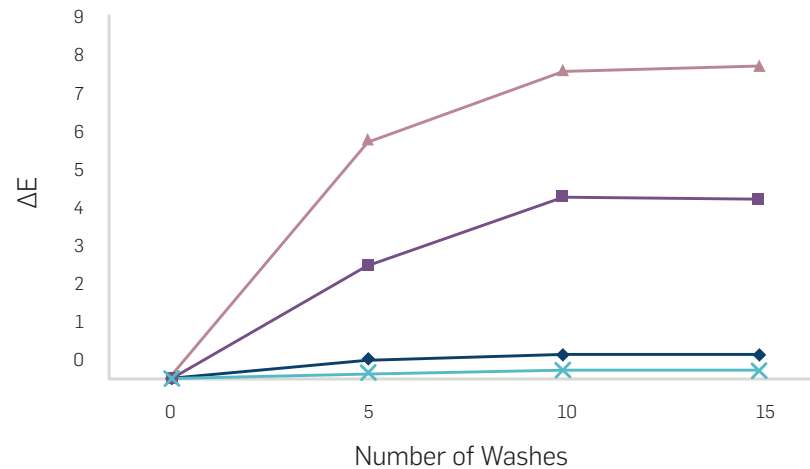
AMMONIA MEA AMP™ DMAMP™



After 15 Washes

### Wash Fastness of Black Shades

- AMP-ULTRA™ PC
- MEA
- AMMONIA
- DMAMP™ ULTRA PC



## Lasting**IMPRESS**ION

### Hair Colorant (Black)

Ammonia- and MEA-free permanent hair colorant for a deep, long-lasting color, with ingredients that nourish and protect hair during the coloring process.

Formulated with **DMAMP™ ULTRA PC** for a low-odor, oxidative hair colorant chassis that provides improved wash-fastness for black and red shades.

#### PROCEDURE:

1. Heat all materials from phase A to 75°C. The temperature should not exceed 80°C because decomposition of the anilines may occur.
2. Heat all materials from phase B to 75°C.
3. Under stirring, pour phase A into phase B and keep stirring for 5 min.

4. Take away the heating and keep stirring until approximately 30°C.

5. Add the neutralizer.

#### COMMENTS:

**Appearance:** High-viscosity cream

**pH** = 10-10.5

**Batch:** SPCAC18-02

Phase	Trade Name	INCI	Supplier	Wt%	
A	1	Water	Water (Aqua)	-	46.16
	2	Tetrasodium EDTA	Tetrasodium EDTA	Labsynth	0.3
	3	Cocamidopropyl Betaine	Cocamidopropyl Betaine	Univar	2
	4	Lipocol® HCO-40	PEG-40 Hydrogenated Castor Oil	Vantage	2
	5	Sodium Metabisulphite	Sodium Metabisulphite	Labsynth	1
	6	Ascorbic Acid	Ascorbic Acid	Labsynth	0.3
	7	Aniline BLFX	Toluene-2-,5-Diamine Sulfate	Jos. H. Lowenstein	2.5
	8	Aniline P Base	p-Aminophenol	Jos. H. Lowenstein	0.83
	9	Aniline DAPE	2,4-Diaminophenoxyethanol HCl	Jos. H. Lowenstein	0.91
B	10	Vegarol 1618	Cetearyl Alcohol	Univar	16.5
	11	Lipocol® O-20	Oleth-20	Vantage	3.5
	12	Brij™ O3	Oleth-3	Croda	3
	13	Isojojoba 50	Simmondsia Chinensis (Jojoba) Butter	Vantage	2
C	14	Lipomulse® Luxe	Cetearyl Alcohol (and) Glyceryl Stearate (and) PEG-40 Stearate (and) Cetearth-20	Vantage	10
	15	DMAMP™ ULTRA PC	Dimethylamino Methylpropanol	ANGUS	9

# PowerCOUPLE

## 2-in-1 Styling Wax

Versatile, matte-finish hair and beard wax ideal for creating textured styles that can be reshaped and restyled throughout the day.

Formulated with **AMP-ULTRA™ PC** for optimal neutralization of hair fixative resins to provide superior high-humidity curl retention.

**PROCEDURE:** (hot process with propeller - heidolph device)

1. Weigh phase A ingredients and mix under magnetic stirring and heat to 85°C.
2. Weigh phase B ingredients and heat to 85°C under magnetic stirring.
3. Add phase B mixture to phase A under propeller at 400 rpm while maintaining 80°C for 10 min.
4. Stop heating and homogenize with high shear 1 min./100g.

**5.** Cool to below 40°C and add phase C ingredients and mix until uniform.

**6.** Validate that the pH is 6-7.5.

**COMMENTS:**

**Viscosity:** 56000 cP (Brookfield RVDV-II+ Pro, Spindle6, 10 rpm, 1 min.)

**pH** = 7.24

**Batch:** PARCAC18-03

Phase	Trade Name	INCI	Supplier	Wt%	
A	1	Water	Water (Aqua)	-	68.05
	2	Glycerine Vegetale 99,7%	Glycerin	Univar	1.5
	3	ACUDYNE™ 1000	Acrylates / Hydroxyesters Acrylates Copolymer	Dow	4.5
	4	AMP-ULTRA™ PC 2000	Aminomethyl Propanol	ANGUS	0.6
B	5	Vaseline Codex Diamant N	Cera Microcristallina (and) Paraffinum Liquidum (and) Paraffin	Aiglon	6
	6	Paraffine Plastique 46/50	Paraffin	Aiglon	2
	7	Cerabeil Blanche Selection	Cera Alba	Baerlocher	2
	8	Iso Jojoba 50	Simmondsia Chinensis (Jojoba) Butter	Vantage	1
	9	Lipocol® SC Pastille	Cetearyl Alcohol	Vantage	5
	10	Lipomulse® Luxe	Cetearyl Alcohol (and) Glyceryl Stearate (and) PEG-40 Stearate (and) Ceteareth-20	Vantage	1
	11	Tegosoft® TN	C12-15 Alkyl Benzoate	Evonik	1
	12	Tegosoft® P	Isopropyl Palmitate	Evonik	1
	13	Tego® Care 165	Glyceryl Stearate (and) PEG-100 Stearate	Evonik	2.5
C	14	Tego® Alkanol S 20 P	Steareth-20	Evonik	2
	15	Xiameter® PMX 200 Silicone Fluid 350cs	Dimethicone	Dow	0.75
	16	Euxyl® PE 9010	Phenoxyethanol (and) Ethylhexylglycerin	Schülke	0.6
	17	Styling SY154387	Fragrance	Kao Fragrances	0.5

# Unbreakable**BOND**

## Styling Gel

Ultra-clear, water-based hair gel adds body and sheen, while providing a firm, natural-feeling hold with excellent high-humidity curl retention.

Formulated with **AMP-ULTRA™ PC 2000** for improved color stability, superior clarity, and excellent flexibility and hold.

**PROCEDURE:** (cold process with propeller - heidolph device)

1. Mix ACUDYNE™ 1000 with water in phase A.
2. Add drop by drop AMP-ULTRA™ PC 2000 until previous solution becomes clear.
3. Mix phase C under magnetic stirring and add slowly in (A+B).
4. Mix phase D under magnetic stirring and add into (A+B+C) mixture until it becomes homogeneous.

5. Adjust pH to 7-7.5 with AMP-ULTRA™ PC 2000, if needed.

**COMMENTS:**

**Viscosity:** 61300 cP (Brookfield RVDV-II+ Pro, Mob 6, 10 rpm, 1 min.)

**pH** = 7.13

**Batch:** PARCAC18-02

Phase	Trade Name	INCI	Supplier	Wt%	
A	1	Water	Water (Aqua)	-	52.40
	2	ACUDYNE™ 1000	Acrylates / Hydroxyesters Acrylates Copolymer	Dow	4.50
B	3	AMP-ULTRA™ PC 2000	Aminomethyl Propanol	ANGUS	0.70
C	4	Water	Water (Aqua)	-	35.00
	5	ACULYN™ 88 Polymer	Acrylates / Steareth-20 Methacrylate Crosspolymer	Dow	5.000
	6	Euxyl® PE 9010	Phenoxyethanol (and) Ethylhexylglycerin	Schülke	1.00
D	7	Marin SY154386	Fragrance	Kao Fragrance	0.20
	8	TAGAT® CH 40	PEG-40 Hydrogenated Castor Oil	BASF	1.20



## DailyTHERAPY

Thermal Protection/Styling/Volumizing Spray

Non-sticky, daily-use thermal protection spray provides excellent support for any style with long-lasting results without stiffness or flaking, while protecting hair against heat styling.

Formulated with **AMP-ULTRA™ PC 2000** for efficient neutralization of hair fixative resins, providing excellent high-humidity curl retention without leaving a sticky residue on hair.

### PROCEDURE:

1. Combine all ingredients under stirring following the order indicated.

### COMMENTS:

**Appearance:** Low-viscosity white emulsion

**pH** = 7.0-7.5

**Batch:** SPCAC18-04

Phase	Trade Name	INCI	Supplier	Wt%
1	Water	Water (Aqua)	-	84.75
2	Versene® Na2 Crystals	Disodium EDTA	Dow	0.1
3	Ethanol	Ethanol	Labsynth	5
4	Glycerin	Glycerin	Labsynth	1
5	Acudyne™ 1000	Acrylates/Hydroxyesters Acrylates Copolymer	Dow	5
6	AMP-ULTRA™ PC 2000	Aminomethyl Propanol	ANGUS	0.2
A 7	Panthenol	Panthenol	DSM	0.5
8	Dow Corning® 5-7113	Silicone Quaternium-16 (and) Undeceth-11 (and) Butyloctanol (and) Undeceth-5	Dow	2
9	Belsil PDM 1000	Trimethylsiloxyphenyl Dimethicone	Wacker	0.25
10	Xiameter® PMX 200/350	Dimethicone	Dow	0.5
11	Neolone	Phenoxyethanol and Methylisothiazolinone	Dow	0.4
12	B124351	Fragrance	Dierberger Fragrâncias	0.3

# FreshSTART

## Hair Wipes

Unique odor-reducing formula and soft, durable wipes provide an easy and convenient way to gently clean and refresh hair.

Formulated with **TRIS AMINO™ ULTRA PC** for efficient neutralization of styling polymer and enhanced odor scavenging.

### PROCEDURE:

1. Combine all ingredients under stirring following the order indicated.

### COMMENTS:

**Appearance:** Low-viscosity white liquid

**pH** = 7.5

**Batch:** SPCAC18-03

Phase	Trade Name	INCI	Supplier	Wt%
1	Water	Water (Aqua)	-	81.2
2	Versene® Na2 Crystals	Disodium EDTA	Dow	0.1
3	Propylene Glycol	Propylene Glycol	Univar	2
4	Ethanol	Ethanol	Labsynth	3
5	TRIS AMINO™ ULTRA PC	Tromethamine	ANGUS	3
A	Acudyne® 180	Acrylates/Hydroxyesters Acrylates Copolymer	Dow	4.5
	Findet ARH	PEG-40 Hydrogenated Castor Oil	Kao	0.5
	Dow Corning® 5-7113	Silicone Quaternium-16 (and) Undeceth-11 (and) Butyloctanol (and) Undeceth-5	Dow	2.5
	Neolone PE	Phenoxyethanol (and) Methylisothiazolinone	Dow	0.4
	Citric Acid (50%)	Citric Acid	Labsynth	2.5
	B124356	Fragrance	Dierberger Fragrâncias	0.3