

ULTRA PC[™]

Multifunctional additives
for personal care and
cosmetics formulations

VERSATILITY. EFFICIENCY. STABILITY.

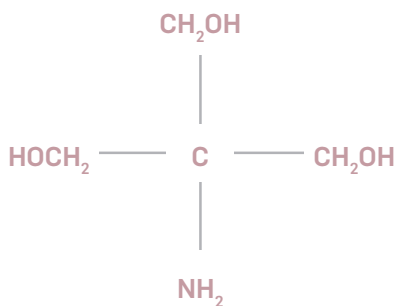
FORMULATE WITH CONFIDENCE

ANGUS' high-purity ULTRA PC™ multifunctional amino alcohols are specifically designed to deliver robust performance across a broad array of personal care and cosmetics applications, including hair care and styling, color cosmetics and skin care.

- High-efficiency neutralization and superior buffering
- Compatibility across a wide range of applications
- Improved stability and rheology with carbomer and fatty acid emulsifiers
- Gentle, low-irritation for hypoallergenic cosmetics
- Low odor and non-yellowing
- 99% minimum purity
- Contains less than 0.5% secondary amines and 50 ppb nitrosamines
- Globally compliant
- Primary amine functionality, no α -Hydrogen
- No animal testing

TRIS AMINO™ ULTRA PC

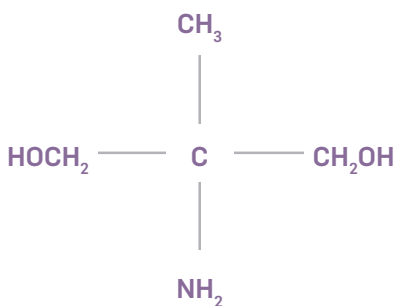
2-Amino-2-Hydroxymethyl-
1,3-Propanediol



INCI: Tromethamine
pKa: 8.1 @ 25°C

AMPD ULTRA PC™

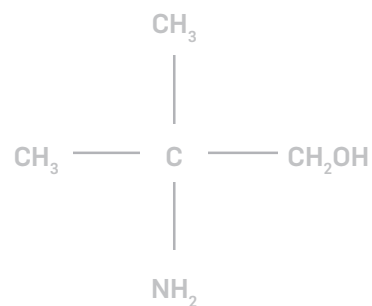
2-Amino-2-Methyl-
1,3-Propanediol



INCI: Aminomethyl Propanediol
pKa: 8.8 @ 25°C

AMP-ULTRA™ PC

2-Amino-2-Methyl-
1-Propanediol



INCI: Aminomethyl Propanol
pKa: 9.7 @ 25°C

SENSITIVE SKIN CARE

Deodorants

Sun care

Shaving foam

COSMETICS

Face creams and serums

HAIR CARE AND COLOR

Cleansers and sanitizers

Hair styling

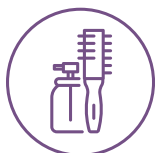
MULTIFUNCTIONAL PERFORMANCE IN A WIDE RANGE OF APPLICATIONS

ANGUS ULTRA PC amino alcohols produce an excellent synergistic effect with fatty acid emulsifiers, carbomer and acidic resins, and deliver robust multifunctional performance—from high-efficiency neutralization and improved emulsion stabilization to enhanced pigment dispersion.



SKIN AND SUN CARE

Enhances emulsion stability and improves rheology profile; helps improve inorganic pigment dispersion for low white-cast residue in sun care applications



HAIR SPRAYS, GELS AND MOUSSES

Compatible with ultra-clear gels and liquids; enables superior high-humidity curl retention and improves washability; provides outstanding in-can corrosion resistance for aerosol sprays



HAIR COLORANTS

Helps produce vibrant and natural-looking colors while reducing hair swelling or damage; low odor



COLOR COSMETICS

Improves application, spreadability and pigment dispersion; improves film development, volume and shine in mascara and eye makeup



CLEANSERS AND HAND SANITIZERS

Improves stability with a high-alcohol tolerance; ideal for formulating crystal clear gels, liquids and solids

GLOBAL COMPLIANCE WITH BROAD REGISTRATION

All ANGUS ULTRA PC grades are compliant with the industry's most stringent standards and regulations worldwide, including:

- U.S. Food, Drug and Cosmetic Act
- European Union Regulation No. 1223/2009
- Japan Standards for Cosmetics (and amendments)
- ASEAN 2008 Cosmetic Directive (annex updated March 2013)
- China Food and Drug Administration "Safety and Technical Standards for Cosmetics"
- Brazil ANVISA Mercosur Resolution on Personal Hygiene Products and Cosmetics
- Mexico: not included in the List of Prohibited and Restricted Substances in Perfumes and Cosmetics

DISCOVER A **BETTER** WAY.

GLOBAL REACH. LOCAL FOCUS.

ANGUS operates six Customer Application Centers (CAC) that serve as regional collaboration hubs by bringing together world-class technical and regulatory expertise specific to the Personal Care industry. With state-of-the-art laboratories and advanced application knowledge, ANGUS works side by side with local and regional customers to expedite innovation essential to bringing new and exciting personal care and cosmetics products to market.



PRODUCT STEWARDSHIP

ANGUS encourages its customers to review their applications of ANGUS products from the standpoint of human health and environmental quality. To help ensure that ANGUS products are not used in ways for which they are not intended, ANGUS personnel will assist customers in dealing with environmental and product safety considerations. For assistance, product Safety Data Sheets, or other information, please contact your ANGUS representative at the numbers provided in this document. When considering the use of any ANGUS product in a particular application, review the latest Safety Data Sheet to ensure that the intended use is within the scope of approved uses and can be accomplished safely. Before handling any of the products, obtain available product safety information including the Safety Data Sheet(s) and take the necessary steps to ensure safety of use.



DISCOVER A **BETTER** WAY.

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