TRIS AMINO® ULTRA PC

Globally Compliant Tromethamine Buffer for Personal Care and Cosmetic Products

For a high purity, broadly compliant tromethamine in commercial quantities for cosmetic and personal care products, make TRIS AMINO® ULTRA PC tromethamine your first choice.

Tromethamine is rapidly becoming a preferred buffer and mild neutralizing amine for personal care and cosmetic products. For this reason, ANGUS has designed TRIS AMINO ULTRA PC based on global compliance needs.

TRIS AMINO ULTRA PC sets a new quality benchmark as it is totally compliant with the recent European Union rulings on purity, secondary amine and nitrosamine content of raw materials used in the manufacture of cosmetics and personal care products.

- Compliant with EU Cosmetics Directive (EC) No. 1223/2009, the recast for the EU Cosmetics Directive 76/768/EEC and Amendments
- CTFA, including listing in USA and Japan (Tromethamine)
- Globally compliant for use in personal care and cosmetics products
- Reliable, consistent, cGMP batch production process
- Mexico Prohibited and Restricted Substances in Perfumes and Cosmetics
- Brazil ANVISA Mercosul Resolution on Cosmetics and Personal Care Products
- ISO 9001:2000 certified
- Batch size up to 1800 kg
- Standard packaging 25 kg drums
- Global supply capability

Key Performance Advantages

- Excellent buffer and mild neutralizer
- Globally compliant
Typical Properties

The following are typical physical/chemical properties of TRIS AMINO ULTRA PC. They are not to be considered product specifications.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Appearance</td>
<td>White, crystalline powder</td>
</tr>
<tr>
<td>Assay on a dried basis, % by weight (minimum)</td>
<td>99.0</td>
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<tr>
<td>Water content, % by weight (maximum)</td>
<td>0.2</td>
</tr>
<tr>
<td>APHA Color, 20% aqueous solution (maximum)</td>
<td>20</td>
</tr>
<tr>
<td>Secondary Amines, anhydrous, % weight</td>
<td>&lt;0.5</td>
</tr>
<tr>
<td>Nitrosamine content, ppb</td>
<td>&lt;50</td>
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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.