TRIS AMINO® HCl PRIME
Innovative Excipient for Superior Purity and Control

Today’s biotechnology researchers and manufacturers seek buffer systems they can rely on for purification during biologic and protein manufacturing. ANGUS Life Sciences has developed the TRIS AMINO® HCl PRIME excipient to uniquely meet this challenge, and help maintain control and purity of your drug products.

TRIS AMINO HCl PRIME, in combination with our TRIS AMINO® Ultra Pure USP/EP, is the buffer system with the lowest levels of elemental impurities available on the market.

Knowing the levels of elemental impurities present in your excipients allows you to maintain control of your manufacturing process and provides needed information when reporting to regulatory agencies. Key performance and support advantages include:

- Total heavy metals are less than one part per million
- Individual elemental impurities are reported
- Developed to be easy to handle
- ANGUS is the only fully integrated TRIS AMINO manufacturer in the world—with over 50 years of TRIS manufacturing experience
- Customer specific packaging and testing available
- Global supply capability

Take purity and control to new levels with the buffer system designed to help you achieve your best biotech manufacturing.
The Product You Need for Exceptional Control and Purification

**TRIS AMINO® HCl PRIME**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Package Size</th>
<th>Product Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIS AMINO HCl PRIME</td>
<td>25 kg</td>
<td>375435</td>
</tr>
</tbody>
</table>

The Product Line to Depend On for Effective Buffering and Stabilization

**COMPLETE LINE OF TRIS AMINO® PRODUCTS**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Package Size</th>
<th>Product Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIS AMINO Ultra Pure (USP/EP)</td>
<td>50 kg</td>
<td>151698</td>
</tr>
<tr>
<td></td>
<td>25 kg</td>
<td>288737</td>
</tr>
<tr>
<td>TRIS AMINO Ultra Pure (USP/EP/JP)</td>
<td>12 kg</td>
<td>201189</td>
</tr>
<tr>
<td></td>
<td>5 kg</td>
<td>154032</td>
</tr>
<tr>
<td>TRIS AMINO Ultra Pure (ACS)</td>
<td>25 kg</td>
<td>146914</td>
</tr>
<tr>
<td>TRIS AMINO Buffer</td>
<td>25 kg</td>
<td>273255</td>
</tr>
<tr>
<td>TRIS AMINO HCl Ultra Pure</td>
<td>25 kg</td>
<td>146948</td>
</tr>
<tr>
<td>TRIS AMINO Crystals</td>
<td>50 lb</td>
<td>144877</td>
</tr>
</tbody>
</table>

**ANGUS Life Sciences Capabilities**

With dedicated support for biotechnology and pharmaceutical applications, ANGUS Life Sciences helps customers develop winning products, shape successful launches and achieve faster time-to-market—all while building in optimized cost effectiveness and efficiency.

At ANGUS Life Sciences, we take the worry out of your important work with a global supply chain, giving you a clear line of sight to key ingredients that go into your products—plus extensive regulatory and application expertise that will support you from end-to-end.

We also provide additional resources, including special testing, custom blending and specialized packaging—key foundational support systems for the formulation, manufacture and delivery of successful life sciences product lines.

**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.

**Capabilities**

**Packaging**
- cGMP custom and private labeling service
- Barcoding
- Custom packaging – 10g to 100kg and larger
- Multiple container options

**Purchasing**
- Global sourcing capabilities
- Formalized qualification process
- Supplier rating and audit program
- Non-animal origin

**Analytical**
- cGMP
- ISO 9001:2008 certified
- Biological testing (RNase, DNase, Protease, Endotoxin, Bioburden)
- Technical service
- Multi-compendia products

**Warehousing**
- cGMP warehousing
- Inventory reservation (pre-shipment sampling)
- Same day shipment

**Sales/Customer Service**
- Same day order/delivery
- Source information
- Bulk and custom pricing
- Confirmation of customer specifications
- Dedicated CSRs