



**ANGUS**<sup>®</sup>  
LIFE SCIENCES



## Key Performance Advantages

Ideal for cell culture applications

cGMP manufactured products

Superior for purification of finished products

[angus.com](http://angus.com)

# Biological Buffers

## Buffers for Life Sciences Research and Biological Production

Rely on ANGUS Life Sciences to supply you with the leading biological buffers for use in cell culture media, biopharmaceutical buffer formulations and diagnostic reagent manufacture.

In biotechnology applications involving large molecule drug development and production, including crucial upstream and downstream steps with cell culture, our biological buffers help produce bioavailable dosage for scale-up and manufacture of an array of biologics.

ANGUS Life Sciences is the world's most experienced manufacturer of TRIS AMINO, the primary buffer used in purification of antibodies, peptides, proteins and blood components. TRIS AMINO is a stable compound guaranteed to meet the specifications of our customers—developed with cGMP-compliant manufacturing processes in ISO 9001:2008 certified facilities.

In addition to offering fine and specialized chemistries to help your best products perform better, ANGUS is a Responsible Care<sup>®</sup> Member Company, and has made a commitment to the Responsible Care Guiding Principles.

- cGMP manufacturing, packaging and testing to meet market specific regulations
- Customer specific packaging and testing available
- Global supply capability
- A TRIS AMINO grade to match your exact requirements

WE MAKE THE BEST PERFORM BETTER

# ANGUS Life Sciences Biological Buffers Product Line

Bis-Tris

HEPES

HEPES Sodium

MOPS

TRIS AMINO® Buffer

TRIS AMINO® Ultra Pure (USP/EP)

TRIS AMINO® Ultra Pure (USP/EP/JP)

TRIS AMINO® HCl PRIME

## 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.

We also provide additional resources, including special testing, custom blending and specialized packaging—key foundational support systems for the formulation, manufacturing 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-compedia 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



®/™Trademark of ANGUS Chemical Company

Notice: No freedom from infringement of any patent owned by ANGUS or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where ANGUS is represented. The claims made may not have been approved for use in all countries. ANGUS assumes no obligation or liability for the information in the document. References to "ANGUS" or the "Company" mean the ANGUS Chemical Company legal entity selling the products to Customer unless expressly noted. NO WARRANTIES ARE GIVEN: ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

Published March 2016 Form No. MLT2212-0216-TCG

North America +1-844-474-9969  
Latin America +55-11-4700-8427  
Western Europe +49-69-38-079-1799  
Central and Eastern Europe +49-69-38-079-1799  
Middle East and Africa +49-69-38-079-1799  
Indian Subcontinent +000-800-440-5098  
Greater China +86-40-0881-1243  
Japan and Korea +81-34-477-4961, +82-23-483-6665  
Southeast Asia, Australia and New Zealand  
+66-2787-3335, +65-6723-1010

[angus.com](http://angus.com)