

# *Worthington – Remembering Where It All Started*



*Charles C. Worthington, 1947*

## *Bulk/OEM Services Our Driving Force is Quality*

The energy that drives all Worthington employees is the deep commitment to consistently produce superior quality products while providing personal service. We factor this into every phase of production, from research and development to final product. New employees join Worthington regularly, yet half have been with the company for over 25 years. Many are related to or are descendants of current and former employees. Their loyalty and pride in Worthington traditions assure continuity in the quality of our products and service.

These diligent, quality-driven experts set the pace in today's enzyme production. They have provided the foundation of Worthington's success for over 70 years.



## *70 Years of Progress*

- *High quality and consistent enzymes since 1947*
- *Products produced under GMP guidelines in Worthington's ISO9001 Certified facility in Lakewood, New Jersey USA*
- *Dedicated bulk and OEM support team*
- *Extensive range of enzymes and biochemicals with an emphasis on new products*
- *Animal-free enzymes for pre-clinical, bioprocessing and biopharma applications*



## *An Emphasis on Continuous Improvement*

Our ISO9001 certified enzyme manufacturing facility and proprietary processes are designed specifically for the life science community, bioprocessing and OEM/private label business partners. Unique in this capacity, we are proud to say that over 90% of our products are manufactured at our core facility located in Lakewood, New Jersey, USA.

Our successful track record is proof of our endurance and dedication to the art and technology of enzyme and protein purification.

Another recent addition to our product line is Celase® GMP, an avian and mammalian tissue-free collagenase and neutral protease enzyme blend produced under cGMP quality conditions by Cytori Therapeutics, a leader in the development of human adipose stem cell isolation therapies for clinical applications. Celase® GMP offers researchers and clinical scientists a single GMP grade enzyme product for primary cell isolation applications from research to clinic.



As a “Primary Producer” we are evolving our technology with innovations, such as Animal-free (AF) products including Collagenases, Proteases, Recombinant DNase I, Ribonuclease T1 and T2, soy and lima bean Trypsin Inhibitors and non-AF Collagenase Types 5, 6 & 7 with higher specific collagenase and caseinase activities.

## *As a Primary Producer, We Offer a Wide Range of Products*

Please refer to our new catalog or website for a complete list of our enzymes, biochemicals and kits with various grades, specifications and unit definitions. **Worthington-Biochem.com**

# The Assurance Bulk/OEM Customers Want

- *Our Animal-free (AF) products enable you to meet the demand for safer enzymes and biopharmaceuticals, minimizing the potential risks of BSE/TSE and/or mammalian virus contaminants*  
**Eliminate many quality and regulatory issues associated with animal-sourced enzymes**
- *Molecular biologicals for component and OEM applications*  
**For DNA/RNA, protein digestion and vaccine processing**
- *USDA or equivalent approved animal sources*  
**All products suitable for worldwide exportation**
- *Bulk inventories available for immediate shipment with flexible and responsive production scheduling*  
**Minimizes lead times**
- *Technical expertise direct from the manufacturer*  
**Before, during and post sale support**
- *Custom and contract multi-scale manufacturing capabilities*  
**Extraction • Fermentation • Purification • Analysis • Packaging**



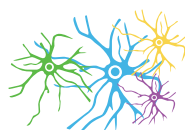
**Cell Biology**  
Tissue Dissociation  
Collagenases/Proteases



**Bioprocessing**  
Animal-free Products  
Regenerative Medicine  
Stem Cell Isolation  
Vaccine Processing



**Biochemistry**  
Protein Purification  
DNase/RNase/Trypsin



**Molecular Biology**  
Nucleases, Nucleic Acids  
DNA/RNA Modifying Enzymes



## Value Verified

Tracking over 100 product citations per month published in scientific journals, we have accumulated a wealth of knowledge for our customers. We have authored numerous technical materials including the Worthington Enzyme Manual and Tissue Dissociation Guide, both available in print and digital formats.

To obtain a print version of our new catalog, please go to:

**<http://www.worthington-biochem.com/maillingList/request.php>**

You can order your free copy directly online.



*For more information, or assistance with pricing, samples, placement of bulk orders or to discuss your bulk or custom requirements, contact Worthington's Bulk Sales Office:*

**Tel:** 610.436.6867 (direct) or  
800.445.9603 (corporate)

**Fax:** 610.436.8534 (direct) or  
800.368.3108 (corporate)

**E-mail:** [patrice.smoyer@gmail.com](mailto:patrice.smoyer@gmail.com) or  
[sales@worthington-biochem.com](mailto:sales@worthington-biochem.com)

## Enzymes and Biochemicals Bulk/OEM Partner Services



*ISO9001 Certified Quality Management System  
All Processes Fully Documented and Traceable  
(from Raw Materials through Final Shipment)*



*Primary Producer (For Biotech, Life Science  
Research, Diagnostic, Biopharmaceutical and  
Bioprocessing)  
Respected Manufacturer of (High Quality,  
Lot-to-Lot Consistent) Enzymes for Over 70 Years*



*Multi-Scale Extraction, Fermentation, Protein  
Purification, Lyophilization and Packaging Capabilities  
Produced Under GMP Guidelines  
Internal Testing Capabilities include Enzyme, Protein,  
and Related Biochemical Analysis and Characterization*



*Animal-Free Certified and USDA Approved  
Animal-Sourced Products  
Suitable for Worldwide Exportation*



*Flexible and Responsive Production Scheduling  
Sample Lots and Bulk Inventories Available for  
Immediate Shipment*



*Superior Customer Services and Technical Support  
— Before, During and After Sale  
Volume Purchases, Bulk Packaging, Standing Orders,  
OEM/Supply Agreements, and Special Arrangements*