



GREENFIELD
GLOBAL

Your Custom Solution Partner: Specialized Capabilities, Expert Execution





Custom Solutions that Work

From Concept to Delivery

When standard products don't meet your needs, our custom solution manufacturing capabilities deliver what you require—safely, efficiently, and to your specifications.

Why Choose Custom Solutions?

When your needs are beyond off-the-shelf:

- Your process requires specific concentrations not available commercially.
- You need hazardous material blending capabilities (e.g., flammable, corrosives) others can't provide or you can't handle in-house
- Custom packaging or specialized single-use connections are essential to your workflow
- You want to eliminate bottlenecks and focus on your core business by handing blended solutions to an external expert
- You need a responsible partner focused on sustainability and responsible practices
- You require specific options for your workflows (e.g., ethyl alcohol with antibiotic-free manufacturing)

The Greenfield Advantage:

- **Hazardous material & EHS expertise:** We are experts at handling hazardous materials - high-proof ethanol, flammable, and corrosive materials that others can't
- **GMP and ISO-certified manufacturing** (IPEC-compliant) with EXCiPACT-compliant offerings available
- **Clean room capabilities** with bioburden control
- **Visibility of supply chain** from raw materials to finished product



Building Your Custom Solution

Typical Challenges We Solve:

- Custom concentrations or blends not available commercially
- Prefer to outsource in-house solution preparation
- Facing production bottlenecks or capacity constraints
- Require safe handling of flammable or hazardous materials

Define Your Requirements

Product Category:

- Acid
- Corrosive
- Flammable
- Unknown

Container Options:

- Single-Use Bags:**
- Standard or Custom volume
- Choose top-fill or bottom-fill configuration
- Request sampling ports (number: _____)
- Request satellite (pre-pulled) samples
- Dispensing connections: _____
- Traditional Packaging:**
- Drums
- Totes / IBCs
- Reusable stainless-steel containers
- Bottles or smaller formats (please specify: _____)

Material Specifications

Formulation Requirements:

- Require compendial quality raw materials
- Need custom specifications beyond standard grades
- Prefer sustainable solutions (e.g., reusable containers, eco-friendly options)
- Request shelf-life data or stability studies

Volume & Application:

- Batch volume expected: _____
- Intended application: _____
- Reorder frequency: _____
- Forecast timeline: _____

Specialized Services:

- Closed-system or open-system filling
- Request clean room production and packaging
- Specify temperature-controlled storage/shipping
- Request custom labeling/documentation

Quality & Testing:

- Require filtration
- Need WFI (Water for Injection) or USP water
- Request process validation/qualification samples
- Request custom certificates of analysis

Our Custom Solutions Manufacturing Process

1. Requirements Intake

Submit your specifications through our streamlined inquiry process. Include volume requirements, technical specifications, application, product specifications, packaging needs, and timeline.

2. Technical Consultation

Our experts review your requirements and schedule a consultation to:

- Clarify technical and product specifications
- Discuss packaging and delivery options
- Review regulatory requirements
- Identify optimal manufacturing approach

3. Solution Design

We develop a solution to your requirements including:

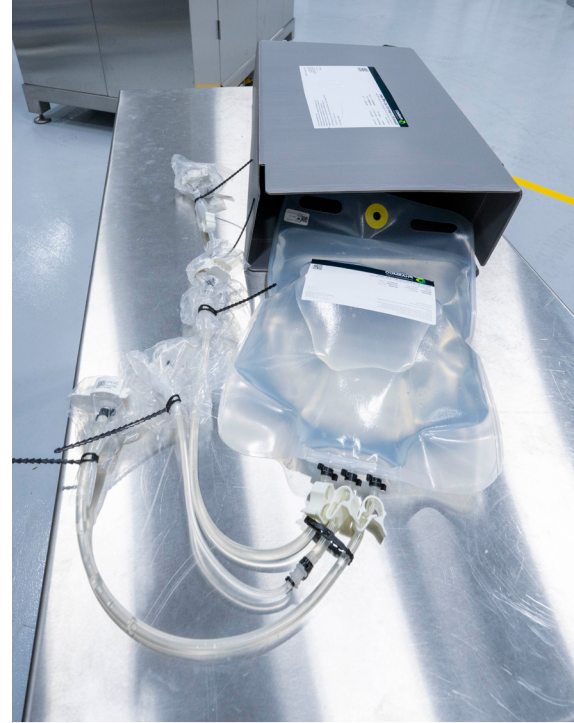
- In-process and finished product specifications
- Manufacturing process plan
- Packaging and connection selection
- Quality testing protocols
- Documentation requirements

4. Sampling and Validation

- Qualification samples for your evaluation
- Process validation if required
- Stability testing and shelf-life determination
- Custom testing protocols

5. Production and Delivery

- GMP manufacturing (IPEC-compliant)
- Consistent quality control
- Complete batch documentation
- Secure packaging and shipping
- Post-delivery support



Our Versatile Packaging

Single-Use Bags:

- Volume range: 0.5 L to 1,000 L
- Multiple connection types available
- Sampling ports and satellite sampling
- Top-fill and bottom-fill options
- Custom tubing lengths
- Gamma-irradiated options

Traditional Packaging Options:

- Glass bottles (0.5 L to 4 L)
- Plastic containers (1 L to 208 L)
- Metal drums (5 L to 200 L)
- Totes and IBCs (1,000 L)
- Reusable stainless-steel containers
- Bulk delivery via ISOtainer, tanker, or railcar

Custom Testing Services:

- Multi-compendial testing
- Elemental impurity analysis
- Microbiological testing
- Custom analytical methods
- Stability studies
- Method validation
- Regulatory support



1 Pint or 500 mL
Poly or Glass



1 Gallon
Poly



4 Liter
Amber Glass



Railcars



5 Gallon Pail
Metal or Poly



55 Gallon Drum
Metal or Poly



270 Gallon
Poly Tote



Bulk
Tanker



Single-Use
Bag



Stainless Steel
Returnable
Container



350 Gallon Steel
Returnable Tote

Our solutions support development across:

- **Small molecule pharmaceuticals:** Supporting synthesis and purification from upstream research to downstream manufacturing
- **Large molecule biologics:** Providing solvent and buffer solutions for protein purification processes
- **Analytical research:** HPLC-grade solvents for chromatography workflows and research scale purifications
- **Medical device:** Supplying cleaning, storage, and processing solvents

Serving customers in more than 50 countries, Greenfield fulfills over 35,000 orders annually through our integrated global supply chain, including three high-purity alcohol distilleries, four blending and packaging facilities, and eight strategic warehouse locations.

What Sets Us Apart

Quality Across the Lifecycle

We ensure the highest quality products through robust supply chain visibility, rigorous quality systems, and a commitment to addressing our life science customer needs.

- **Rigid standards:** Products available as manufactured under ISO 9001 and/or EXCiPACT certified facilities
- **Compendial testing:** USP, EP/BP, JP, ACS monographs
- **Traceability:** Full chain of custody from our GMP (IPEC-compliant) facilities to end-user manufacturing sites
- **Exceptional quality:** Products available as processed in a white room/clean room environment and tested for bioburden/endotoxin

Agile Manufacturing

We reduce the complexity of your supply chain through tailored solutions.

- Custom capabilities with exceptional quality and rapid delivery
- 30+ years of recognized experience supplying the pharma industry
- Dedicated GMP (IPEC-compliant) facilities designed for life science applications
- Antibiotic-free ethyl alcohol produced from renewable materials available
- Hazardous material expertise, including flammable and corrosive chemical blending

Infrastructure that Delivers

Our production and distribution capabilities ensure a secure, reliable supply.

- **Robust global network:** three high-purity ethyl alcohol distilleries with low carbon intensity emission scores
- **Scalable operations:** Supporting everything from pilot runs to full commercial production
- **93% perfect order index:** industry-leading performance
- **1–3-day delivery:** across North America and Europe for many products

Sustainability Leadership

We are committed to sustainable and responsible practices that minimize environmental impact and advance renewable solutions.

- Operate one of Ireland's first Near Zero Energy Building (NZEB) facilities
- Use waste heat from our Chatham, Ontario plant to heat local greenhouses, supporting circular resource use
- Source sustainable corn from 300+ growers and promote climate-friendly farming practices
- Convert municipal organic waste into renewable natural gas



Ready to explore custom solutions?

Contact our custom manufacturing team:

Submit an inquiry through our online portal



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[greenfield.com](https://www.greenfield.com)

Appropriate/legal use of all products are the responsibility of the user and subject to applicable local laws and regulations.