

Chemicals

# Chemical products & services

Supporting bench to production applications  
for multiple industries

Whether you are in research and discovery or planning for scale to commercial manufacturing, Thermo Fisher Scientific has **92,000+ chemicals** to choose from through our extensive global network of **3,500+ manufacturers**.

**80K+**  
Research-use  
chemicals

**12K+**  
Production-use,  
cGMP chemicals

Who we serve



Biopharma  
Diagnostics  
Electronics  
Healthcare  
Industrial  
Pharma

What we deliver



Amino acids  
Acid/Base solutions  
Biological buffers  
Biological reagents  
Specialty chemicals and materials  
Cleaning agents & disinfectants  
Carbohydrates  
Chromatography column cleaning  
& preservation  
Developers  
Etchants  
High-purity water  
Media supplements  
Minerals and vitamins  
Organometallics  
Organic and inorganic reagents  
Resist (positive/negative)  
Resist strippers  
Salts & inorganics  
Solvents  
Surfactants & emulsifiers  
*And more*

Our global reach



North America  
Europe  
Asia Pacific

# Commitment to sustainability

Thermo Fisher Scientific is helping to develop and deliver innovative and environmentally responsible products for our customers.

Look for the  to see which chemical solutions are designed specifically to support your sustainability goals.

## Chemicals and services for every step of your bench-to-production journey

### Sourcing support

Availability of raw materials is critical to business success—lengthy lead times and shortened supply of raw materials cannot stand in your way. Accessing our broad portfolio allows you to choose your desired chemicals that help you successfully fulfill your sourcing needs and build your chemical library.

Our sourcing team has the global reach to provide support for your chemical sourcing decisions and strategies—primary, secondary, and multi-sources—for your projects in R&D stages through commercialization.

### Supplier and order management

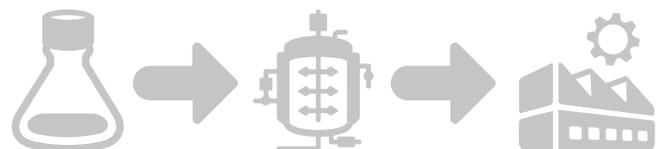
Our expertise of supply chain management helps to ensure the right chemicals—manufactured by Thermo Fisher Scientific or outsourced from our global supplier network—are accessible for your applications. Thereby consolidating your supply chain so your team can focus on other critical elements within your processes.

*Consider your sourcing strategy to help ensure the supply security of your most critical and large-volume chemicals.*

	 <b>Good</b>	 <b>Better</b>	 <b>Best</b>
	Single sourcing	Secondary sourcing	Multi-sourcing
Number of sources per chemical	1	2	3 +
Reliability of supply	Weak	Medium	Strong
Risk of production delay	High	Medium	Low



Safeguard timelines with more than one source of your critical chemicals



# Research chemicals & services

## Bulk chemical services for non-GMP

Looking to scale up? Looking to simplify the process by using high-quality chemicals? Looking to adapt packaging to scale?

With our extensive portfolio of chemicals, we offer comprehensive solutions for all your chemical needs. Whether you are engaged in initial research or scaling up to full production, we can customize products exclusively for you.

Our bulk chemical solutions will allow you to go beyond the catalogue and scale up from grams to hundreds or thousands of kilograms.



## Returnable drums and containers

If you are routinely using more than 4 L of solvents and blends, then it might be time to learn more about our returnable drums service.

Returnable drums and containers are an ideal choice for handling larger quantities of high purity solvents and blends. Re-usable, stainless steel drums with a closed system can help reduce the amount of solid waste generated, and can prevent the release of flammable or toxic vapors into the air.

### Ensure your product purity

- Returnable drums – protect chemical from external environmental
- Moisture sensitive – keep solvents and blends with low water content
- Low interactions with the inert packaging – maintaining product purity

### A safer way to manage and work with solvents and blends

- Returnable drums and containers are made from high quality stainless steel, which means that there is no risk of breakage compared to a glass bottle
- Flammable or toxic solvent liquids and vapors are not released into the surrounding air



## Less waste and less disposal costs

Our returnable drum system can help reduce the amount of liquid waste generated in your laboratory, thereby reducing environmental impact.

- **A reusable 200 L returnable drum replaces fifty 4 L bottles and associated packing materials. Almost 200 lbs of glass and cardboard are eliminated by each 200 L returnable drum system – helping to support you meet your corporate sustainability goals**
- **Empty returnable drums are cleaned, maintained and refilled by Thermo Fisher Scientific – saving you time and money**

Our returnable drums are available in 19 to 1,350 L sizes.

## Custom chemicals service for non-GMP

The chemical or reagent itself is only a part of the total package. If your needs differ to our catalog product offerings why not take advantage of our custom chemicals service.

Custom Chemicals Service			
Custom blends and synthesis	Custom specifications	Custom labels	Custom packaging & pack size
Save time and get better product consistency by letting us prepare your custom-made chemicals at our facilities.	Take advantage of our extensive chemical services to define and meet your unique specifications.	Use our labeling services to display the right product/batch details to enhance product identification for your laboratory.	Get the right product in the packaging material or size that you require.

We can facilitate your bulk and custom purchases through timely provision of necessary documentation such as:

- **Synthesis route**
- **Country of origin**
- **Details of the manufacturer**
- **Supplier qualification and audits**
- **Change control**
- **Document control**

As a global chemicals business, we operate a Quality and Environmental Management System which complies with the requirements of ISO 9001 and ISO 14001, ensuring that our products and services meet our customers' expectations.

## Custom blends and synthesis

Whether you're looking to synthesize complex organic building blocks, create custom solvent blends, optimize your synthesis, or develop a scalable route, we can provide the expertise and knowledge to support your project. Our extensive database of production methods for over 8,000 compounds has been developed through 50 years' experience in custom manufacturing.



## Custom packaging and labeling

Designed for safety, environmental protection, convenient handling and storage and preservation of product integrity while complying with all relevant regulations. Help improve handling, storage, and product integrity by receiving the exact material you want in the exact packaging you want.

In addition, our custom weighing service can provide you with products at a scale from nanogram to ton.

## cGMP chemicals & services

When you are challenged to grow and scale your manufacturing capabilities in preparation commercialization, you are tasked with strategic business decisions to source reliable raw materials to use in a regulated environment and optimize your capacity. Our team of technical specialists in cGMP chemical sourcing and supply chain management can help you achieve quality compliance and prevent process interruptions or delays through our suite of chemical services.

We work as an extension of your team to create a reliable chemical supply chain—providing business continuity to help accelerate milestone achievement and speed to market.

### Production Chemicals and Sourcing Services

**Access all of the major cGMP chemicals your processes need.**

Production Chemicals and Sourcing Services enables you to consolidate cGMP chemical orders of multiple brands from various manufacturers to help maximize your resources and protect your timelines.

**12K+**  
GMP-manufactured,  
multi-compendial  
chemicals

**100+**  
industry-leading  
cGMP chemical  
manufacturers and  
suppliers accessible  
around the globe

**Integrated  
supply chain  
capabilities**

### About our cGMP Service Centers

- ISO 9001:2015 certified
- Validated cGMP/GDP-compliant Quality Management System (QMS) and technology systems
- HAZMAT-controlled storage for flammables, corrosives, poisons, and oxidizers
- Built-in redundant procedures for consistency of orders
- Temperature mapped, controlled, and monitored\*
- Clean rooms meeting ISO 8 standards\*



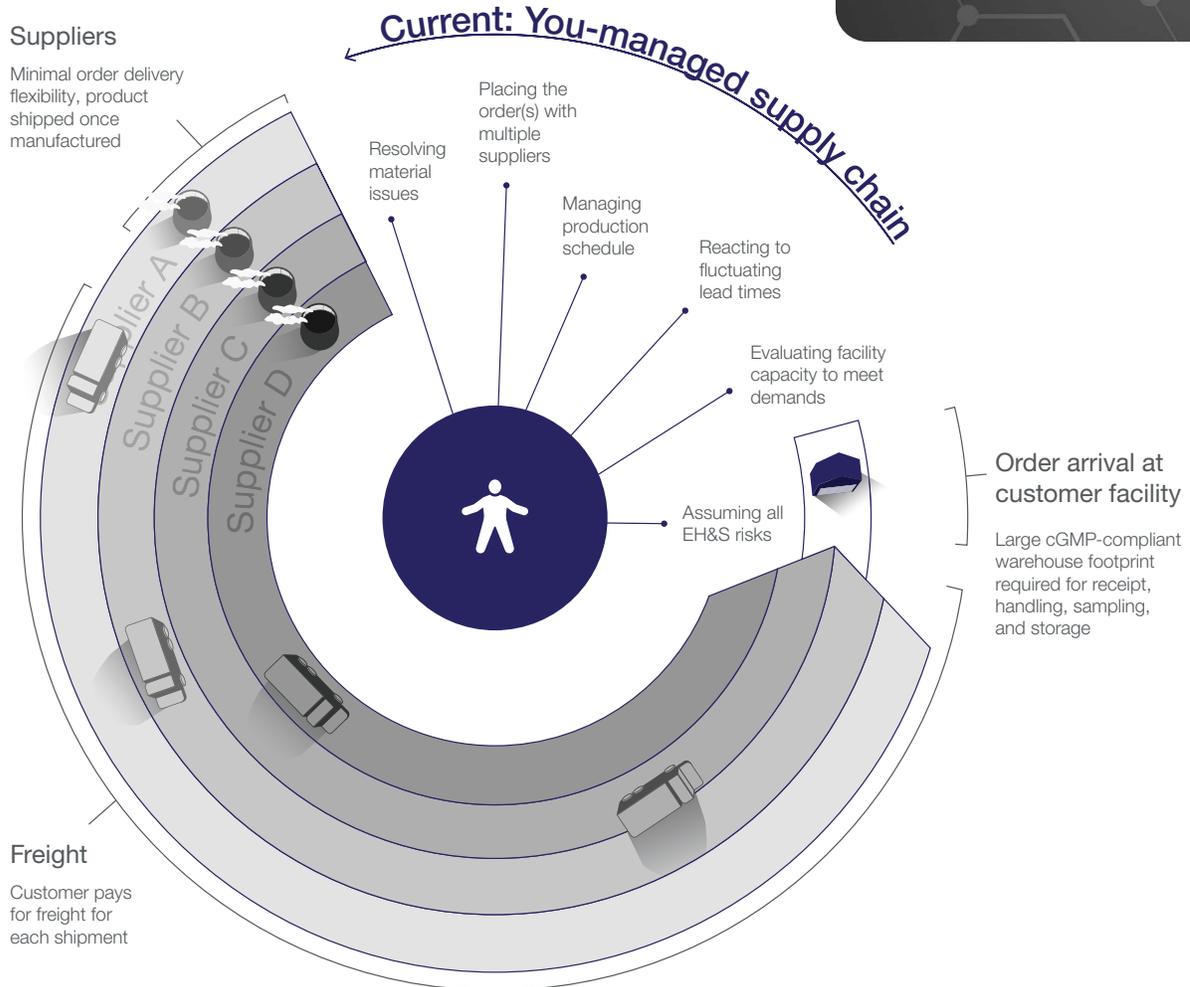
# Direct Material Supply Chain Services

The right support can make a cGMP supply chain operate seamlessly. Imagine simplifying orders and deliveries without increasing your facility's footprint or inventory on hand. Thermo Fisher Scientific can help streamline all aspects of your cGMP chemical supply chain management, helping you achieve your milestones faster.

Consider how you manage your current cGMP supply chain using this diagram.

**Industry observations**

- \$5M**  
Average cost to build a cGMP-compliant warehouse
- \$600K**  
Average cost to build a cleanroom
- 85%**  
OTIF performance industry average when working direct with a supplier



**You-managed**  
Working directly with suppliers can increase the complexity of your supply chain and tie up valuable resources.

cGMP warehouse capacity requirements

FTE resource requirements

Cash tied up in inventory

# Future: Thermo Fisher - managed supply chain

## Material order and receipt

- Supplier relationship management
- Order management
- Alternative sourcing assistance
- Customer-aligned supply management
- Multi-step receipt inspection
- cGMP-compliant storage

## Supply assurance

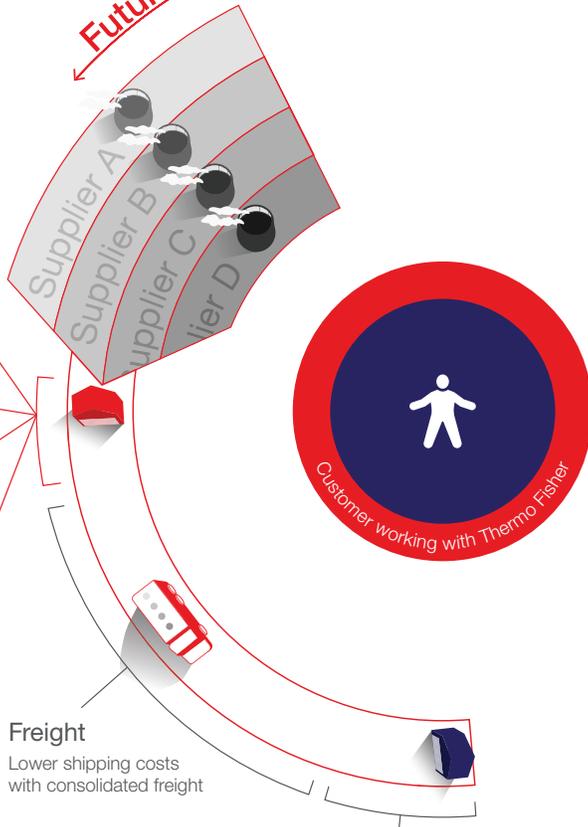
- Custom stocking agreements
- Inventory management

## Material handling and warehousing

- Custom labeling and barcoding
- Pallet transfer
- Down packing
- Dip tube exchange
- Safety stock storage

## Sampling and release

- Raw material sampling
- QA/QC inspection
- Material release labeling



**Freight**  
Lower shipping costs with consolidated freight

**Order arrival at customer facility**  
Reduced warehouse and cleanroom space required and less cash tied up in inventory

**Thermo Fisher managed**  
The right support can help make your supply chain operate seamlessly.

Discover how your cGMP supply chain can achieve a consolidated and simplified future state using this diagram.

## cGMP Distribution Services

Maintain compliance in your deliveries of GMP-manufactured chemicals and reduce transportation emissions by consolidating your supply chain.

cGMP Distribution Services helps to ensure that the cGMP quality of your chemical order is maintained in transit to your facility. *This service is automatically included in Production Chemicals and Sourcing Services.*

cGMP warehouse capacity requirements    FTE resource requirements    Cash tied up in inventory

Achieve **90% OTIF** performance

## Assurance of Supply Services

Get the GMP-manufactured chemicals you need, when you need them with just-in-time delivery.

Assurance of Supply Services helps you meet growing demand so that raw materials are available and delivered to you when you need them.

cGMP warehouse capacity requirements    FTE resource requirements    Cash tied up in inventory

Achieve **>90%\* OTIF** performance

## Warehouse Efficiency Services\*

Achieve efficiency in receiving, handling, and storing your cGMP chemicals.

Warehouse Efficiency Services provides material support including custom barcoding and labeling, poly-palletization, recycling of empty containers, and dip-tube exchange.

All our cGMP Service Centers recycle cardboard, as well as returnable drums and containers. With poly-pallet transfer, we recycle the wood pallets or reuse them to send future materials.

cGMP warehouse capacity requirements    FTE resource requirements    Cash tied up in inventory

## Production Ready Services\*

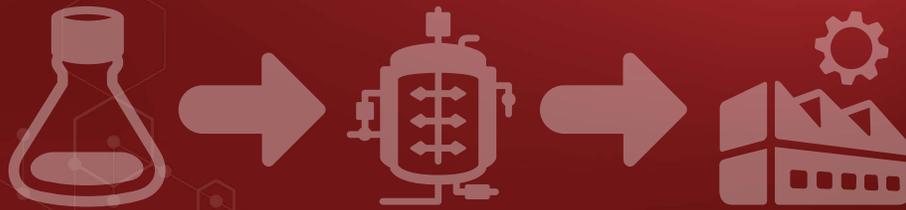
Accelerate raw materials quality release.

Production Ready Services helps you shorten the QA/QC-release cycle necessary before cGMP chemicals can be brought into production processes through raw material sampling and planning for safety stock inventory.

cGMP warehouse capacity requirements    FTE resource requirements    Cash tied up in inventory

\* Currently only available within the United States

\*\* Excludes constrained chemicals.



Scan the QR code to request more information about our chemical products & services.



Product and service availability may vary by country and is subject to appropriate or region-specific regulatory requirements. Contact your Thermo Fisher technical specialist for more information at: [thermofisher.com/chemicalsolutions](https://thermofisher.com/chemicalsolutions). **For Research Use Only or Further Manufacturing. Not for diagnostic use of direct administration into humans or animals.** It is responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use. © 2023 Thermo Fisher Scientific Inc. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.

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