

# Fine Chemicals for Research and Production



- Global Manufacturing
- Global Inventory
- Global Services

**Alfa Aesar**<sup>®</sup>  
*A Johnson Matthey Company*

# One Source, Globally

Part of the Johnson Matthey group of companies, Alfa Aesar is a leading manufacturer of fine chemicals and catalysts used for research and development in a wide span of applications.

Alfa Aesar is a trusted, service-oriented company. Product quality is of paramount importance, but production expertise is just the beginning. Factors such as product availability, packaging and delivery are just as crucial to meeting and exceeding your expectations. Our established quality process ensures a high level of service and a promise of continually striving for perfection.

Our dedicated teams, situated around the globe, are there to help you find the right products for your application when you need them. Our experience in manufacturing, sourcing and handling a wide range of chemicals enables us to respond quickly and efficiently to your needs.



## Global Inventory

The majority of our 33,000 products are available in semi-bulk or bulk quantities from stock. Some are in regular production and are available in bulk for next day shipment. We also supply most products from stock in research and development quantities.

## Global Sourcing

Knowledgeable chemical industry experts on our global sourcing team know what manufacturers match best to your needs. All Alfa Aesar vendors are assessed for quality and service to remain on our approved vendor list. We practice rigorous in-house product testing to ensure quality standards.

## Global Distribution

Meeting the demand of our customers requires that we carry inventory for nearly all of our 33,000 products in one of our five global distribution centers and grow stocks through key distributors such as VWR in Singapore and Uni-Onward and Echo Chemical in Taiwan. In each region, through direct representatives or distributors, we employ experienced and knowledgeable sales representatives who are able to provide consultation and support to our customers.

# Global Manufacturing

## Fine Chemicals from Grams to Tons

Drawing on years of production experience and the shared intellectual resources across the Alfa Aesar and Johnson Matthey groups, our chemists have the skills and experience to deliver quality chemicals utilizing process routes from laboratory scale through pilot plant to commercial scale production.

### Lab Scale Organics

Our research scale labs in Heysham, UK and Yantai, China employ dozens of PhD production chemists utilizing nearly 200 fume hoods and a broad variety of chemical reactions. Our teams are process oriented, developing routes that are both scalable and efficient. Both the Heysham and Yantai teams are set up to handle projects in the 1kg to 100kg scale.



### Semi-Bulk and Bulk Scale

At the brand new Alfa Aesar Synmax production labs in Yantai, China, an experienced team uses proven techniques and state of the art facilities to offer diverse production capabilities. The 2,100 square meter pilot plant building houses eight reactors ranging from 100L up to our two 2000L glass lined vessels. The pilot plant includes specialized equipment for distillation and low temperature chemistry.

### Full Time Equivalentents

Alfa Aesar Synmax also offers Full Time Equivalent (FTE) services for those customers not requiring GMP certification. A variety of packages are available utilizing our R&D labs, Kilo labs and the pilot plant. Contact an Alfa Aesar sales office for more details.

### High Purity Inorganics

Known worldwide as a producer of high purity inorganic compounds, Alfa Aesar produces thousands of distinct materials to exacting standards for research, development and production applications. Custom production and packaging services are regularly offered from our high purity production plant in Royston, England.

### cGMP and API Production

We now offer cGMP and API compounds in kilo scale to large capacity production. Riverside, our dedicated API manufacturing facility in Conshohocken, Pennsylvania, further expands our large scale operations. With a total reactor capacity of 140,000L and a 5,600m<sup>2</sup> production area, this facility is a scalable, flexible, multi-purpose production facility with highly automated, DCS recipe driven operations. Riverside is equipped to manufacture parenteral grade APIs (microbial/endotoxin environmental controls) and is licensed to produce DEA controlled substances in Schedules I and II.

Our experienced development and production teams can deliver a variety of products to meet the needs of customers in fields varying from pharmaceuticals to semiconductors, structural materials and imaging.



# Chemicals for Research

Our team of chemists can produce an extensive range of organic and organometallic compounds, as well as high purity inorganic compounds.

## Organic Intermediates and Reagents

Our involvement in a global research chemicals business means we have practical experience with almost every organic reaction. We offer the majority of our range of 33,000 molecules in catalog sizes, semi-bulk or bulk quantities from stock.

The following listings outline just some of our organic chemistry experience:

Boronic Acids and Esters  
Fluorinated Intermediates  
Iodoaromatics  
Indoles  
Azodicarboxylates  
Pyridines  
Hypervalent Iodine Reagents  
Silylating Agents and Silanes  
Sulfonyl Chlorides  
Phase-Transfer Catalysts and Ionic Liquids  
Calixarenes  
β-Dicarbonyls  
Binaphthyls

## High Purity Inorganic Compounds

Known worldwide as a leading manufacturer of high purity inorganic compounds, Alfa Aesar produces thousands of distinct materials to exacting standards for research, development and production applications.

Our brands are recognized for purity and quality and are backed by technical and sales teams dedicated to providing the best service.

**PURATRONIC®**  
HIGH PURITY RESEARCH  
CHEMICALS & MATERIALS

**Puratronic® High Purity Inorganics**

**ULTRADry™**  
Anhydrous Materials

**UltraDry Anhydrous Materials**

**REacton®**  
Rare Earth Metals  
and Compounds

**REacton® Rare Earth  
Products**

**ACS Grade Chemicals**

**Nanopowders and Dispersions**





# Global Resources

## Catalog

This 2,900 page publication with 33,000 products is equal parts catalog and handbook. It features over 4,000 new products, many of which are novel fine organics, including over 800 new boronic acids and esters. Other products include aryl homopiperazines, zeolites, fluoroaromatic compounds, silica gels and more. Many of the new products are unique and exclusive to Alfa Aesar.

Alfa Aesar continues to extensively augment the technical content of the catalog with thousands of new and updated application notes, synonym listings and other specification details. Molecular structure diagrams are included for most chemicals, and the catalog is extensively indexed by Chemical Abstract Service (CAS) number, stock number and molecular formula. The product listings for all hazardous substances are also enhanced with hazard pictograms and newly implemented precautionary and hazard phrases in accordance with Globally Harmonized System (GHS) standards. In addition to chemical compounds, the catalog includes special sections listing pure elements, alloys, analytical products, and precious metal compounds and catalysts.



## Website

Our website has been designed to extend to customers across the globe and features multi-region and multi-language support, enhanced product search and e-commerce platform, and up-to-the-minute news and product updates. Alongside a fresh design and user-friendly features, the site includes:

- Enhanced tools for product searches with intricate chemical terminology
- Molecular structure/substructure search
- Competitor product number search
- Alphabetical index
- Pure element search
- Platinum labware search
- MSDS search
- Certificate of Analysis search
- Quote request
- Technical inquiry



We continue to improve the online shopping experience with additional enhancements including quick order entry as well as a My Account page, where registered users have access to their favorites list, saved shopping carts, and order history and status. Our robust global inventory tracking feature provides accurate pricing and availability information and item detail pages have been complemented with expanded technical information, including literature references and links to related products.

### Database Services

The Alfa Aesar product database is accessible in various file formats, which allows us to provide you with methods for locating the products or family of products to match your requirements.

### Catalog Directories

Alfa Aesar products are listed in the Available Chemicals Directory (ACD), SciQuest, ChemFinder, Chemical Abstract Service and numerous other public databases and buyer's guides.

### Custom Synthesis

We offer flexible custom manufacturing services to produce quality products with the assurance of full confidentiality.

### Customer Service

Our dedicated scientific and commercial teams offer the full service package, from concept to production, packaging and delivery. Our experienced customer service staff is well-equipped with systems enabling them to detail not only prices and availability, but also special handling and shipping factors that may affect your order. Product specialists in our inside sales team are well-versed in our production capabilities and key supplier strengths, enabling them to give you competitive prices and make sure your order arrives on time.

### Technical Service

Clarification about product specifications can often help with your application or make a purchasing decision. Our technical Product Specialists are on hand and ready to help you with your technical questions and to help with your application.

### Quality Control

We employ advanced quality control for both in-process and final testing phases. The high standard of modern quality control and assurance facilities is matched by the expertise of our experienced staff. Various ISO certifications are in place or pending at all Alfa Aesar production and distribution locations.



### New Product Development

As a research chemicals business we strive to bring you a constant stream of new screening compounds, building blocks, novel materials and other hard to find items. Our new product development team works hand in hand with our production chemists and key supply partners to identify and bring to market the most cutting edge items. Hundreds of new products per month are added to supplement the catalog.



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A Johnson Matthey Company

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