



## **Add GFS Chemicals Specialty Manufacturing to your CRO/CMO Toolkit**

### **Our Flexible Manufacturing Methodology is the Reason Why**



GFS Chemicals Specialty Manufacturing can uniquely support your contract research or contract management organization. Our responsiveness, attention to detail, expertise and planning set us apart from the rest.

Our team brings great value, not overhead, to your project and here's why:

Operating under many of the same principles as contract organizations, GFS has served high tech and pharmaceutical *Fortune 500* companies around the globe for 80+ years. GFS is committed to surpassing your service level for complex, deadline-driven, confidential projects.

#### **We bring a practical approach to custom chemistry**

Leveraging our proprietary product base, we customize our materials to meet your requirements. That saves you time, learning curve and money. Our vertical integration strategy provides you with a reliable, predictable, and consistent source for raw materials.

**GFS is your best choice for custom acetylene chemistry because our company has a backbone of experience which includes the manufacture over 350 of 600 acetylene compounds and derivatives.**

#### **We offer a “no surprises” methodology**

Your project is evaluated from all perspectives. Your single point of contact directly manages the operations group and maintains regular contact through e-mail, telephone, conference call or in-person as required. The project lead conducts team meetings routinely to supply you with status reports and progress updates.

In addition, we won't take on a project unless our core technology matches your requirements.

As a privately held company, we can quickly make investment decisions to add capacity or equipment as the need arises.



### Flexibility for Contract Research

While other companies are focused on one manufacturing method, GFS is skilled in handling many hazardous materials including acetylene, liquid ammonia, organometallics and bromine, among others. GFS uses liquid ammonia in many applications. With over forty years experience manufacturing acetylene compounds and derivatives, GFS Chemicals is the most reliable partner for pilot scale, plant scale, production scale or research and development scale projects involving acetylene chemistry.

### Specializing in kilos to ten metric tons



### Core Competencies

- ❖ Acetylene Chemistry
- ❖ Propargylic Amines
- ❖ Specialty Halides
- ❖ Si Blocked Compounds
- ❖ Custom Grignard Chemistry
- ❖ Birch Reductions
- ❖ Alpha/Omega Functionalization
- ❖ Bromine Chemistry

### Organic Reaction Expertise

- ❖ Acetylide Coupling
- ❖ Alkylation
- ❖ Amidation
- ❖ Bromination
- ❖ Chlorination
- ❖ Dehydrohalogenation
- ❖ Dissolving metal reductions
- ❖ Friedel-Crafts Reaction
- ❖ Gabriel Synthesis
- ❖ Iodination
- ❖ Low Pressure Hydrogenation
- ❖ Skraup Reactions
- ❖ Sonogashira Coupling
- ❖ Stille Coupling
- ❖ Suzuki Coupling



GFS organic production operations are a zero discharge facility compliant with all local and federal EPA regulations. We adhere to ISO 9001:2008 standards for quality practices and have been ISO certified since 1997.



As a U.S. based chemical producer, our three divisions span organic, inorganic and analytical chemistry. The GFS Chemicals catalog lists over 6,000 small bottle reagents for R&D and Q.C.

**Customers benefit from our manufacturing expertise in both organic and inorganic chemistry.**

**GFS Chemicals Inorganic Manufacturing Division – Producing Kilos to Metric Tons:**

- ❖ Oxidizers & Catalysts
- ❖ Perchlorates
- ❖ Nitrates
- ❖ Chlorides
- ❖ Carbonates
- ❖ Sulfates & Iodides
- ❖ Anhydrous Salts

**Demanding Specifications at Bulk Rates**

Interested in learning more? **Contact [Krista@gfschemicals.com](mailto:Krista@gfschemicals.com)** or call **1-614-224-5013 ext. 355**

Please provide your volume requirements, timeline and specifications.  
The GFS team will be happy to evaluate if we can support your needs.

**For additional Information Visit: [www.gfsorganics.com](http://www.gfsorganics.com) or [www.gfschemicals.com](http://www.gfschemicals.com)**

