

GFS
CHEMICALS®

95 YEARS OF
SERVICE TO
INDUSTRY
WORLDWIDE



Acid Selection Guide

GFS Chemicals offers a full range of acids in a variety of grades to satisfy all lab applications.

GFS manufactures and distills acids to meet rigorous standards, from ACS grades for everyday use, to ultra-low levels of trace impurities for trace metal and impurity testing. Our product offering clearly delineates acids and their grades to simplify the offering to customers, while covering a wide array of applications in the lab.

Our products are made in the USA in Columbus, Ohio. With almost 100 years in the industry, our application specialists, analytical chemists, and product experts are involved in product and process development to ensure the highest quality of acids with the highest degree of consistency for our customers.





World class quality.

GFS Chemicals has invested heavily in both manufacturing and analysis. Our state-of-the-art clean room, next generation proprietary distillation technology, and advanced analytical techniques with ICP-MS results in a data analytics and data scrutiny culture for our process and quality controls. With data analysis and operational reporting down to the minute, we can manage our processes for the slightest variations. With our advanced statistical process controls we can test every product for its analytes (as reported on the C of A) several times per day. By painting a continuous picture of quality, we can maintain our product quality consistently with world class results.

Our position as the manufacturer creates a distinct opportunity for customers.

In any industry, costs and lead time are constantly under a high degree of scrutiny. As the manufacturer, we are positioned to offer prices and lead times which help eliminate these issues. As a customer of GFS Chemicals, labs and users can reduce the risks associated with material changing hands throughout the supply chain. By shortening the supply chain to the manufacturer, our customers receive support directly from those involved in the manufacturing process. By eliminating waste in material movement, we can work with customers to create the most efficient supply chain. From our location in Columbus, Ohio, we can service customers quickly and effectively. Same day or next day shipping is available for in stock products.

As a manufacturer, our goal is to make what you need. By working with our application specialists, analytical chemists, and product experts we have identified a logical arrangement of product grades from ACS all the way up to ultra-pure low PPT trace impurity acids. Our aim is to satisfy every lab need, from cleaning crucibles to trace metal digestions and testing.





Our acid offering separates acids into two categories: core offerings and non-core offerings.

Our core acids are acids which customers should expect to have available as “in stock.” These acids can be thought of as the “building blocks for the lab” and are offered from ACS grades all the way to low PPT grades. Nitric acid would be a good example of a core acid. Barring extreme circumstances in the supply chain our goal is to have inventory on hand and available to ship same day or next day for our customers.

GFS recognizes that there are tests and analytical methods which require more specialty, non-core acids for a specific purpose. While they are not commonplace in every lab, they are important to have for different activities. Customers can expect that these acids may have a short production lead time associated with them. These acids may be offered at select grades but will not cover all applicable grades which are offered by GFS Chemicals. Hydrobromic acid would be a good example of a non-core acid; offered in ACS grade and ultra low PPT grade, this is a small batch, special use product and therefore what is considered a “non-core” offering.

GFS acid specifications

ACS

Meets or exceeds ACS specifications

ACS SUPERIOR

Meets ACS specifications with some analytes tested to PPM levels

VERITAS REDISTILLED

Instrument analyzed for ~35 analytes to low PPB levels

VERITAS TRACE

Instrument analyzed for ~68 analytes most to less than 1 PPB

Manufactured and bottled in a class 100 environment PPO bottle

VERITAS ULTIMATE

Instrument analyzed for ~68 most analytes to less than 50 PPT

Manufactured, bottled, labeled and packaged in class 100 environment fluoropolymer bottle

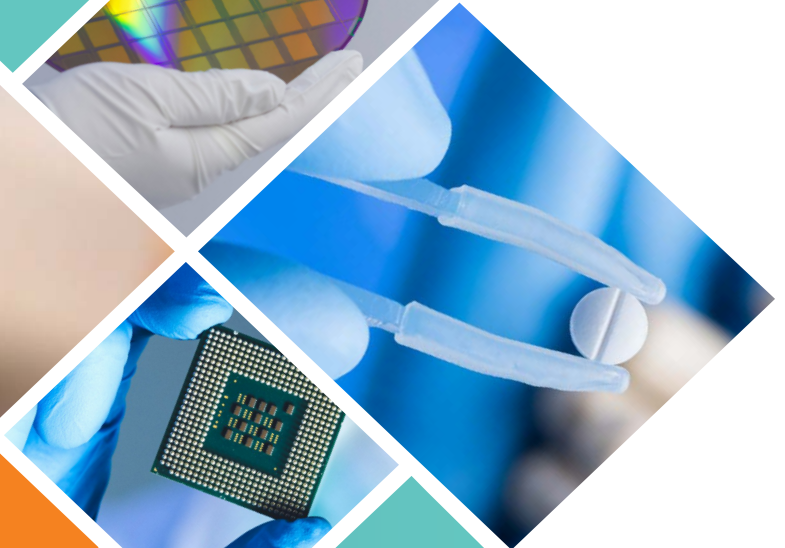
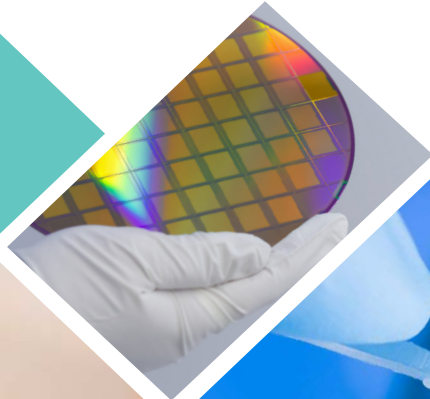
Acids Selection Table

Acids Selection Table	ACS	ACS Superior	Veritas Redistilled	Veritas Trace	Veritas Ultimate
Acetic Acid	624	2583	546	7150	7250
Formic Acid, 88%	650	2585			
Hydrobromic Acid	930				7260
Hydrochloric Acid	625	2586	2180	7110	7210
Hydrofluoric Acid	931			7130	7230
Hydroiodic Acid	2399				
Nitric Acid	626	2587	63	7100	7200
Perchloric Acid 50%	6601				
Perchloric Acid 60%	69	2967			
Perchloric Acid 70%	66	2477	67	7140	7240
Phosphoric Acid 85%	627	1589			
Sulfuric Acid	628	2588	1512	7120	7220
Type 1 Water					7290

For a complete listing of all GFS acids and products, visit [gfschemicals.com](https://www.gfschemicals.com)

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