

# BATTERY & POWER STORAGE CHEMICALS



**GFS has been producing and selling high-quality materials to the battery and fuel cell markets for decades.**

**Scale-up processes:** GFS Chemicals has been involved in scale-up processes involving novel or emerging battery and fuel cell materials. We readily support this market in different stages of development, ranging from experimental, R&D volumes, all the way up to multi-metric ton quantities for full scale commercial production.

**High purity acid:** Integrated in a number of key chemistries such as lithium, nickel, cerium, and silver. Our expertise in high purity acid distillation makes GFS Chemicals a proven leader in bulk manufacturing of low trace metal salts. Our specialty bulk drying equipment allows us to provide ultra-dry materials used in many fuel cell and advanced battery systems.

## Some of the products we manufacture include:

- Lithium Iodide (solid electrolyte, low current applications)
- Lithium Perchlorate, Anhydrous
- Rare Earths (dopants involving Cerium, Yttrium, Lanthanum, and Ytterbium)
- Specialized Electrolyte Solutions
- Anhydrous Cadmium Compounds
- Iron and Silver Based Etchant Solutions
- Cobalt, Zinc, Manganese Compounds
- High Purity Acids
- Cerous Chloride, Anhydrous (fuel cell chemistry & catalysis)
- Lithium Nitrate



## ABOUT GFS CHEMICALS

- Commitment to Quality**
- Specialized chemistries with ultra-pure chemicals
  - Custom manufacturing capabilities
  - Facilities are ISO 9001:2015 certified

- Shipping**
- Export to 80+ countries
  - Handle a wide range of packaging configurations
  - Navigate the complex shipping requirements of hazardous materials

- Service**
- Tailored sizes, packaging and specifications
  - Responsive customer service
  - Expert technical & manufacturing personnel
  - Quick turn-around of in-stock products

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# PROCESS-PERFECT INORGANIC CHEMICALS



## GFS can support your business by providing:

Tighter metal specifications, single batch-charge packaging, and a technical team based at our production facility.

Is your supply chain as strong as it could be?

ITEM #	CHEMICAL NAME
646	Ammonium Nitrate, ACS
602	Barium Chloride, Dihydrate, ACS
8	Barium Perchlorate, Trihydrate, Reagent
779	Calcium Nitrate, Tetrahydrate, ACS
12	Calcium Perchlorate, Hydrated, Reagent
13	Ceric Ammonium Nitrate, ACS
768	Ceric Ammonium Nitrate, Commercial
2909	Ceric Ammonium Nitrate, Superior ACS
7683	Ceric Ammonium Nitrate, Electronics Grade
1574	Ceric Nitrate, 1.0N Solution
1575	Ceric Nitrate, 1.5N Solution
24	Ceric Sulfate, Reagent
29	Cerous Chloride, Heptahydrate, Reagent
30	Cerous Nitrate, Hydrated, Reagent
666	Cupriethylenediamine, 1 M Solution
39	Ferric Perchlorate, Hydrated, Yellow, Reagent
40	Ferric Perchlorate, Hydrated, Non-Yellow
42	Ferrous Perchlorate, Hydrated, Reagent
44	Iodic Acid, ACS
634	Lanthanum Chloride, Heptahydrate, ACS
633	Lanthanum Nitrate, Hexahydrate, Reagent
2595	Lithium Iodide, Anhydrous
611	Lithium Nitrate, Reagent
53	Lithium Perchlorate, Trihydrate, ACS
221	Lithium Perchlorate, Anhydrous, ACS
233	Lithium Perchlorate, Battery Grade

ITEM #	CHEMICAL NAME
805	Sodium Tartrate, Dihydrate, ACS
55	Magnesium Perchlorate, Anhydrous, ACS
56	Magnesium Perchlorate, Hexahydrate, Reagent
652	Oxalic Acid, Dihydrate, ACS
1277	Oxalic Acid, Dihydrate, High Purity
66	Perchlorate Acid, 70%, ACS
69	Perchloric Acid, 60%, ACS
987	Potassium Chlorate, ACS
554	Potassium Acid Phthalate, Primary Standard (ACS)
2354	Potassium Acid Phthalate, Buffer Grade
80	Potassium Perchlorate, ACS
373	Potassium Perchlorate, Commercial
1190	Silver Iodide, Reagent
378	Silver Nitrate, ACS
1029	Sodium Chlorate, ACS
658	Sodium Nitrate, ACS
559	Sodium Nitrite, ACS
91	Sodium Perchlorate, Anhydrous, ACS
92	Sodium Perchlorate, Monohydrate, ACS
807	Strontium Chloride, Hexahydrate, ACS
808	Strontium Nitrate, ACS
96	Strontium Perchlorate, Trihydrate, Reagent
1216	Yttrium Nitrate, Hexahydrate, 99.9%
102	Zinc Perchlorate, Hexahydrate, Reagent

This list is a small sampling of the chemicals GFS can manufacture. To view our full range of chemicals, scan the QR code and visit our Inorganics division home page.

