

Critical Minerals *for a More Resilient World.*

About Albemarle

Albemarle (NYSE:ALB) is a U.S.-based specialty chemicals company that leads the world in transforming essential resources into critical ingredients for mobility, energy, connectivity and health. We are one of the world's largest lithium suppliers and an industry leader in bromine solutions that are essential for modern living. Based in Charlotte, N.C., Albemarle serves customers in approximately 70 countries and has the only lithium-producing mine in the U.S., which helps support the development of a critical domestic supply chain.

Lithium (Li)

Lithium is a critical element that plays a significant role in various aspects of modern life. It is essential for national security and energy independence, serving as a cornerstone in the development of advanced technologies and renewable energy solutions in multiple industries and applications. Lithium is indispensable in our daily lives as it is present in countless everyday products, enhancing modern living.



Aerospace & Defense

Aircraft Materials, Drones and Electric Vertical Take-Off and Landing (eVTOL), Satellites, Defense Systems

- Lithium batteries provide long-term energy to satellites
- Aircraft use lithium in various components to reduce weight and increase fuel efficiency
- Drones rely on lithium batteries for lightweight power
- Lithium batteries are crucial for eVTOL aircraft, which aim to revolutionize urban air mobility
- Lithium metal and derivatives are key materials for propulsion systems, missiles and weaponry for defense systems
- Lithium batteries power everything from unmanned defense systems, missiles and munition



Automotive & Electric Vehicles

EV / Hybrid / Plug-In Hybrid EV Batteries, Plastics, Specialty-Grade Tires

- Lithium-ion batteries are essential for electric and hybrid vehicles, providing high energy density and long life cycles
- Lithium compounds enhance tire durability and performance



Agriculture & Food

Agrochemicals, Equipment and Machinery

- Butyllithium and other reagents are used for the synthesis of agrochemical compounds such as herbicides and fungicides
- Lithium batteries power heavy machinery, providing efficient and reliable energy





Building & Construction

Self-Leveling Floors, Glass and Ceramics, Enamel Glazes, Cookware and Appliances, Cement and Tile Adhesives, Road Pavements

- Self-leveling floor materials use lithium for its quick-setting properties
- Lithium compounds are used in glazes to improve color, durability, finish and more
- Lithium enhances the heat resistance and durability of cookware coatings and cooktop stoves
- Refrigerators, stoves and washing machines use lithium compounds in coatings to improve performance and longevity
- Lithium additives accelerate the setting time of cement and adhesives, improving construction efficiency
- Lithium hydroxide is used to preserve concrete construction materials against adverse reactions



Electronic Devices

Device Covers and Glasses, Phones, Tablets, TVs, Laptops, Chargers, Batteries, Robots, E-bikes, Wearables, Semiconductor Manufacturing

- Lithium compounds help increase the durability of electronic device covers
- Lithium-ion batteries are used in most modern smartphones and tablets
- Laptops incorporate lithium batteries for extended longevity
- Lithium batteries supply power to robots, enabling longer operational periods
- Electric bikes utilize lithium-ion batteries for efficient and lightweight power sources



Grid Storage

Power Grid, Solar Panels, Energy/Grid Storage Solutions

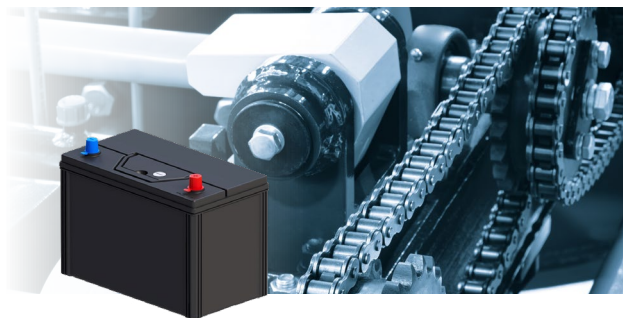
- Power grids utilize lithium for energy storage
- Lithium batteries store energy generated from solar panels, enhancing renewable energy reliability
- Lithium storage solutions boost grid efficiency and reliability



Industrial Processes

Equipment and Machinery, Metallurgy, Lubricating Greases

- Lithium batteries power heavy machinery, providing efficient and reliable energy
- Lithium enhances the physical and chemical properties of metals and alloys
- High-performance lithium greases are essential in automotive, steel, aircraft and heavy machinery industries



Medical Devices & Equipment

Pacemakers, Vitamins, Pharmaceuticals

- Lithium batteries provide long-lasting power for pacemakers
- Lithium is used in the development of new active ingredients and synthesis routes, and in medications for mood disorders, hypertension, and HIV

