

Lithium-ion Battery Materials Market by Battery Chemistry (LFP, LCO, NMC, NCA, LMO), Material (Cathode, Anode, Electrolyte), Application (Portable Device, Electric Vehicle, Industrial), & Region (APAC, Europe, North America, ROW) - Global Forecast to 2028

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Abstracts

The Lithium-ion battery materials market is projected to grow from USD 34.2 billion in 2023 to USD 97.5 billion by 2028, at a CAGR of 23.3% from 2023 to 2028. The market for lithium-ion battery materials is witnessing growth across different regions. Asia Pacific and North America are prominent markets. North America is growing rapidly due to increase in electric vehicle adoption and a growing renewable energy sector, while Asia Pacific is driven by electric vehicle expansion and a strong consumer electronics market, reflecting a strong demand for lithium-ion battery materials market.

“By battery chemistry, lithium iron phosphate (LFP) segment accounted for the second-largest share in lithium-ion battery materials market in 2022.”

The lithium iron phosphate (LFP) segment held the second-largest share in 2022. These lithium iron phosphate (LFP) battery chemists are known for their ability to maintain performance over a long time, which makes them a reliable choice for applications that require sustained power, particularly in stationary energy storage systems and electric buses. Additionally, their stable thermal behavior ensures they don't overheat, enhancing their safety in various uses. With a robust and enduring performance, LFP chemistry addresses safety concerns and offers cost-effective solutions for projects that require reliability and resilience.

“By material, the electrolyte material accounted for the second-largest share in lithium-ion battery materials market in 2022.”

The electrolyte material held the second-largest share in 2022. These materials facilitate the flow of ions between the battery's anode and cathode, allowing for efficient energy storage and release. Their significance is increased as the market experiences a rise in electric vehicles and renewable energy projects, where battery safety and performance are crucial. Electrolyte materials that offer high ionic conductivity, thermal stability, and non-flammable characteristics are particularly in demand, contributing to their substantial market presence. Electrolyte materials are essential for the evolving lithium-ion battery landscape, offering solutions that align with the growing needs of clean energy and transportation sectors.

“By application, the portable devices segment accounted for the second-largest share in lithium-ion battery materials market in 2022.”

The portable devices held the second-largest share in 2022. The fast growth of smartphones, laptops, and wearables, coupled with the ever-increasing demand for longer battery life and faster charging, enhances the importance of lithium-ion batteries. These batteries power everyday gadgets, offering high energy density, extended cycle life, and lightweight design, making them the ideal choice for portable electronics.

“The Lithium-ion battery materials market in North America accounted for the second-largest share in 2022.”

North America was the second-largest consumer of lithium-ion battery materials market in 2022. The region has witnessed a remarkable growth in electric vehicle (EV) adoption, propelled by growing environmental consciousness, government incentives, and increasing consumer demand for sustainable transportation. This surge in EV production and infrastructure development has driven substantial demand for Lithium-ion batteries. Furthermore, North America's growing consumer electronics sector and the ongoing expansion of renewable energy projects emphasize the importance of lithium-ion battery materials. The collective influence of these factors positions North America as a vital region in the Lithium-ion battery materials market.

Profile break-up of primary participants for the report:

By Company Type: Tier 1 – 65%, Tier 2 –20%, and Tier 3 – 15%

By Designation: C-level Executives – 25%, Directors – 30%, and Others – 45%

By Region: North America – 30%, Europe –20%, Asia Pacific – 40%, Middle East & Africa-7%, South America –3%

The lithium-ion battery materials report is dominated by players, such as BASF SE (Germany), Umicore (Belgium), 3M (US), Sumitomo Metal Mining Co., Ltd. (Japan), Resonac Holding Corporation (Japan), and others.

Research Coverage:

The report defines, segments, and projects the size of the lithium-ion battery materials market based on battery chemistry, materials, application, and region. It strategically profiles the key players and comprehensively analyzes their market share and core competencies. It also tracks and analyzes competitive developments, such as joint ventures, collaborations, partnerships, acquisitions, agreements, investments, and expansions undertaken by them in the market.

Reasons to Buy the Report:

The report is expected to help the market leaders/new entrants in the market by providing them with the closest approximations of revenue numbers of the lithium-ion battery materials market and its segments. This report is also expected to help stakeholders obtain an improved understanding of the competitive landscape of the market, gain insights to improve the position of their businesses and make suitable go-to-market strategies. It also enables stakeholders to understand the pulse of the market and provide them information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers (growth in the production of lithium-ion batteries, surge in demand for consumer electronics), restraints (substitute related to lithium-ion battery, safety concerns regarding the transportation and storage of lithium-ion battery), opportunities (growing R&D to enhance efficiency and upgrade the lithium-ion batteries, decline in the overall price of lithium-ion battery), and challenges (fluctuation in raw material prices) influencing the growth of the synthetic fuels market.

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities in the lithium-ion battery materials market.

Market Development: Comprehensive information about lucrative markets – the report analyses the Lithium-ion battery materials market across varied regions.

Market Diversification: Exhaustive information about new products, various types, untapped geographies, recent developments, and investments in the lithium-ion battery materials market.

Competitive Assessment: In-depth assessment of market shares, growth strategies and product offerings of leading players such as BASF SE (Germany), Umicore (Belgium), 3M (US), Sumitomo Metal Mining Co., Ltd. (Japan), Resonac Holding Corporation (Japan), POSCO FUTURE M (South Korea), Tanaka Chemical Corporation (Japan), Toda Kogyo Corp. (Japan), LANDF CORP. (South Korea), JFE Chemical Corporation (Japan), SGL Carbon (Germany), NEI Corporation (US), KUREHA CORPORATION (Japan), BTR New Material Group Co., Ltd. (China), UBE Corporation (Japan), and others in the lithium-ion battery materials market.

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