

# Global and China Lithium Battery Electrolyte Industry Report, 2014-2018

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## STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

### **REPORT OBJECTIVES**

- To establish a comprehensive, factual, annually updated and costeffective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- To help company to succeed in a competitive market, and

## **METHODOLOGY**

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

### **INFORMATION SOURCES**

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

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## **Abstract**

As one of the four key materials, electrolyte is mixed in certain proportions of solvent, electrolyte, and additives. It is mainly used in the fields such as consumer electronics, electric vehicles, and energy storage devices.

Globally, lithium battery electrolyte, which originated in the 1990s, has long been monopolized by Japanese and South Korean manufacturers. With the growth of Chinese electrolyte manufacturers and domestic production of lithium hexafluorophosphate, the foreign capacity of lithium battery electrolyte has been gradually shifted to China, with the capacity in China for 2014 accounting for 53.3% of the global total.

The global consumer electronics have the largest demand for lithium battery electrolyte, occupying 80.7% in 2013, followed by the demand from electric vehicles, sharing 13.5% in 2013. It is projected that amid the slowed growth in demand from consumer electronics and rapid expansion in EV demand, the EV's demand for lithium battery electrolyte will exceed consumer electronics' in 2018.

## Lithium Battery Electrolyte Sales Volume and Accounts of Global Main Manufacturers, 2013/2014



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In order to improve the battery energy density to increase EV driving range, high-voltage cathode materials will be mainly developed. Therefore, the corresponding high-voltage electrolyte will become the main trend for future electrolyte development. Globally, 4.2-4.35V high-voltage electrolyte has now become mature; 4.4-4.5V high-voltage electrolyte is being marketed; and 5V high-voltage electrolyte is under development. Additive formula is a major technological means to obtain high-voltage electrolyte and thus become a top priority of investment. The gap in solvents and additives between Chinese and foreign manufacturers is narrowing.

World's influential lithium electrolyte producers consist of Ukseung, LG CHEM, Mitsubishi Chemical, UBE Industries, Guotai Huarong, and Capchem, etc. In 2013, the sales volume of lithium battery electrolyte globally amounted to 61,000 tons, 9.5% of which came from Ukseung, making it the world's No. 1. And Guotai Huarong, the largest lithium battery electrolyte manufacturer in China, represented 8.5% of the global total, ranking the third place worldwide.

**Ukseung:** the company's biggest lithium electrolyte client is Samsung SDI (a global leader in small-sized lithium batteries). In 2013, Ukseung sold 57.7% of its products to Samsung SDI. In addition, the company shared some of its electrolyte patents with Samsung SDI.

**UBE Industries:** the company has gradually transferred electrolytic capacity to China. In 2013, UBE Industries (24.5%), together with HNEC (51.0%), HighChem (24.5%), established a joint-venture electrolyte raw material (DMC) production company in Puyang city, Henan province, with production capacity of 100kt/a.

**Guotai Huarong:** In September 2014, a 5kt/a lithium battery electrolyte project was completed and received final acceptance. Thus, the company's lithium battery electrolyte capacity was expanded to 10kt/a.

**Capchem:** In July 2014, the company acquired a 76% stake in Zhangjiagang Hicomer Chemical Co., Ltd., a company that produces lithium battery additives, for RMB27.97 million, hoping to improve electrolyte industry chain.

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**Guangzhou Tinci:** In September 2014, the company publicly offered shares for raising funds in an attempt to purchase a 100% interest in Dongguan Kaixin. When the acquisition is completed, the company will successfully enter ATL lithium battery industry chain.

Global and China Lithium Battery Electrolyte Industry Report, 2014-2018 by ResearchInChina highlights the following:

- Development history, market size, competition pattern, etc of lithium battery electrolyte worldwide;
- Status quo, market size, competitive landscape, etc of lithium battery electrolyte industry in China;
- Lithium hexafluorophosphate market size and competition pattern in China and beyond, and downstream applications of lithium battery electrolyte, etc.;
- >Lithium battery market size, market structure, competitive landscape, etc in China and the World;
- Deration, revenue structure, layout in China, etc of seven foreign lithium battery electrolyte manufacturers;
- Deration, revenue structure, competitive edges, etc of ten Chinese lithium battery electrolyte producers.



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