This and other sections of this document contain information relating to the industry in which we operate. Certain information and statistics set forth in this section have been extracted from the Frost & Sullivan Report issued by Frost & Sullivan, an independent market research agency, which we commissioned, and from various official government publications and other publicly available publications. Information and statistics from official government sources have not been independently verified by us, the Sole Sponsor, the* [REDACTED]*, the* [REDACTED]*, the* [REDACTED] *and the* [REDACTED]*, any of the* [REDACTED]*, any of our or their respective directors, officers or representatives or any other person involved in the* [REDACTED] *and no representation is given as to their accuracy.

SOURCE AND RELIABILITY OF INFORMATION

We have commissioned Frost & Sullivan, an independent market research and consulting company, to conduct an analysis of, and to prepare a report on the global and the PRC toluene and toluene derivative products industry. The report prepared by Frost & Sullivan is referred to in the document as the Frost & Sullivan Report. A total fee of RMB1,180,000 was paid to Frost & Sullivan for the preparation of the report, which we believe reflects market rates for reports of this type. Frost & Sullivan is a global consulting company founded in 1961 in New York and has over 40 global offices with more than 2,000 industry consultants, market research analysts, technology analysts and economists.

The Frost & Sullivan Report was undertaken through both primary and secondary research obtained from various sources using intelligence collection methodologies. Primary research involved discussing the status of the industry with certain leading industry participants across the industry value chain and conducting interviews with relevant parties to obtain objective and factual data and prospective predictions. Secondary research involved reviewing information integration of data and publication from publicly available sources, including official data and announcements from government agencies, and company reports, independent research reports and data based on Frost & Sullivan's own data base.

In compiling and preparing the Frost & Sullivan Report, Frost & Sullivan has adopted the following assumptions (i) the social, economic and political environments in the relevant markets are likely to remain stable in the forecast period and (ii) industry key drivers are likely to drive the global and the PRC toluene and toluene derivative products industry in the forecast period. Frost & Sullivan believes that the basic assumptions used in preparing the Frost & Sullivan Report, including those used to make future projects, are factual, correct and not misleading. Frost & Sullivan has independently analyzed the information, but the accuracy of the conclusions of its review largely relies on the accuracy of the information collected. Frost & Sullivan research may be affected by the accuracy of these assumptions and the choice of these primary and secondary sources.

Our Directors, after due and reasonable consideration, are of the view that there has been no adverse change in the market information since the date of the Frost & Sullivan Report which may qualify, contradict or have impact on the information therein.

OVERVIEW OF GLOBAL TOLUENE AND TOLUENE DERIVATIVE PRODUCTS INDUSTRY

Overview of Synthetic Organic Chemistry Industry

Organic compounds are a type of chemical compounds where one or more than one carbon covalently bonded with each other and with other atom like nitrogen, oxygen, halogen etc., such as, toluene (C_6H_5Cl), methane (CH_4), ethane (C_2H_6), benzene (C_6H_6), Chloroethane (C_2H_5Cl) etc. Downstream applications include food & beverages, pharmaceuticals, pesticides, agrochemicals, water treatment, crop protection, personal care products & cosmetics, fertilizers, automotive industry, gasoline additives, polymers, and chemicals. As an important part of global chemistry market, the global synthetic organic chemistry industry has demonstrated significant growth driven by research and development, growing industrialization and downstream demand. Many advanced researches are being carried out with huge investments in research and development.

Introduction of Toluene and Toluene Derivative Products

Toluene is commonly used as one of the most important chemical raw materials. It is a colorless, transparent, volatile liquid with special aromatic fragrance at room temperature. It is mainly used for blending gasoline components and the main production of toluene derivatives, explosives, dye intermediates and drugs. Toluene derivative products can be produced through various reaction processes, including oxidation, chlorination of toluene and ammonification of benzoic acid.

- Toluene oxidation products: Benzoic acid and sodium benzoate are important toluene oxidation products. Benzoic acid, which is white crystal or powder, is widely used as preservative and intermediate in food, pesticide, medicine, printing, and dyeing industries. Sodium benzoate, which is white crystal or colorless powder, is mainly used in the pharmaceutical industry, printing and dyeing industry, plant genetic research and other fields.

- Toluene chlorination products: Benzyl chloride and benzyl alcohol are the most common toluene chlorination products. Benzyl chloride, a colorless transparent liquid with a pungent odor, is an important organic synthesis intermediate, used in the manufacture of spices, dyes, drugs, and synthetic resins. Benzyl alcohol, a colorless liquid, is used to make flavors and pharmaceutical raw materials, and can be used as a solvent for preservatives, paints, and dyes.

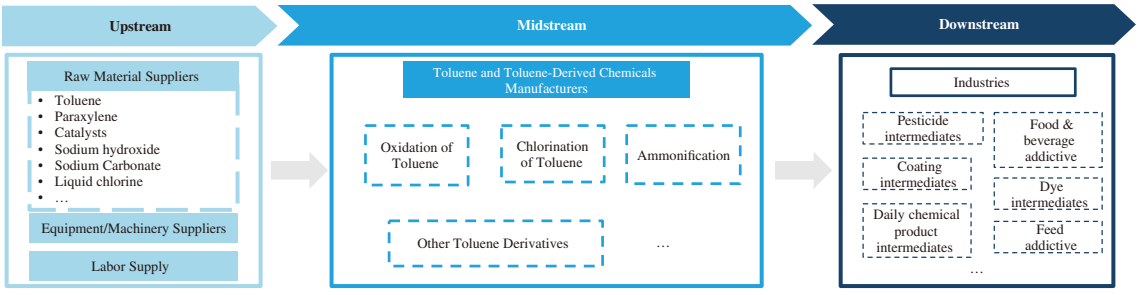
- Benzoic acid ammonification products: Benzonitrile and benzoguanamine are typical benzoic acid ammonification products. Benzonitrile is a colorless oily liquid with an almond smell. It is mainly used as a pesticide, dye intermediate, solvent antioxidant, and solvent for other organic substances. Benzoguanamine is a white crystalline powder, which is mainly used for making thermosetting resins, modified resins, amino coatings, plastics, pesticides and dyes.

- Other fine chemical products: Other fine chemical products mainly include benzyl acetate and p-methyl chlorbenzy. Benzyl acetate is a kind of colorless liquid with sweet, floral fruity odor, which is mainly used for the production of edible flavors and fragrances. P-methyl benzyl chloride is a colorless/white/yellow low melting solid or liquid, which is used as pharmaceutical intermediate.

Industry Value Chain Analysis

The main market participants of the industry chain for toluene and toluene derivative products include toluene suppliers (upstream), specialty chemicals manufacturers (midstream), and intermediate manufacturers (downstream). Leading companies cooperate with upstream chemical companies to guarantee the continuous supply of raw materials. The upstream of toluene and toluene derivative products is the raw material suppliers. Chinese toluene market fluctuates mostly around supply and demand fundamentals and changes at the macro level. The influencing factors of the PRC's toluene market are also undergoing major changes due to public health and safety measures, the state's control over the bulk commodity market, and the downward shift of industry profits. The global toluene market has long been affected by the macroeconomic and financial situation, the cost side effect, and the supply and demand changes in the industry. The midstream includes specialty chemical manufacturers that produce toluene derivative products. Different products are produced based on chemical technology owned by different companies. The downstream are mainly companies that produce chemical intermediates covering various industries including food & beverage addictive, feed addictive, coating intermediates and pesticide intermediates.

The sales channels of toluene and toluene derivative product industry includes (i) direct sales; (ii) distribution sales; and (iii) products trading. Distributorship model is considered the norm in the industry as the distribution network (i) extends sales across different provinces and cities in the PRC domestically and across different countries internationally, and allows for the penetration of the Group's products, (ii) partially shifts the credit risk from manufacturers to distributors and (iii) facilitates the formulation of sales and marketing strategy based on market trends and intelligence from different geographic and customer segments.



Source: Frost & Sullivan Report

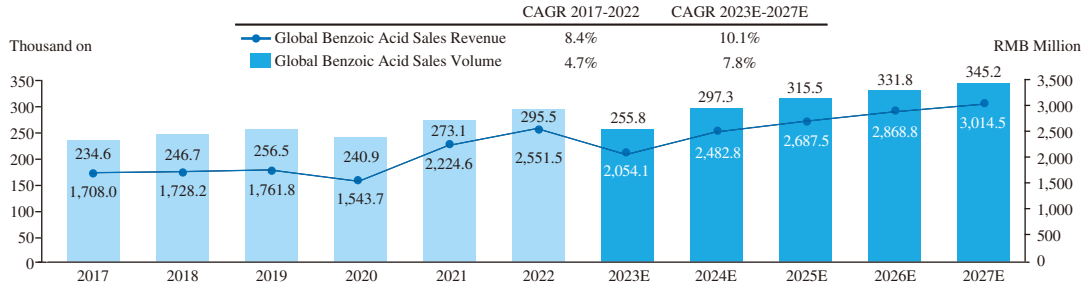
Global and the PRC Sales Volume and Sales Revenue of Benzoic Acid

The global production capacity of benzoic acid reached approximately 750.0 thousand tons in 2022. Leading benzoic acid manufacturers have been expanding production capacities to meet the increasing downstream market demand. It is expected that the global production capacity will increase to approximately 767.9 thousand tons by 2027. The global sales volume of benzoic acid increased from approximately 234.6 thousand tons in 2017 to approximately 295.5 thousand tons in 2022, representing a CAGR of 4.7%. The global sales revenue of benzoic acid increased from approximately RMB1,708 million in 2017 to approximately RMB2,551.5 million in 2022, representing a CAGR of 8.4%. In 2020, the supply chain and logistics crisis caused by COVID-19 pandemic materially affected chemicals manufacturers. Many manufacturing facilities were forced to shut down or operate at reduced capacity,

leading to lower production capacity for most raw materials. During the same period, the sales volume of the PRC benzoic acid increased from approximately 116.4 thousand tons to approximately 160.6 thousand tons, representing a CAGR of 6.6%. The sales revenue increased from approximately RMB941.6 million to approximately RMB1,540.8 million, representing a CAGR of 10.4%.

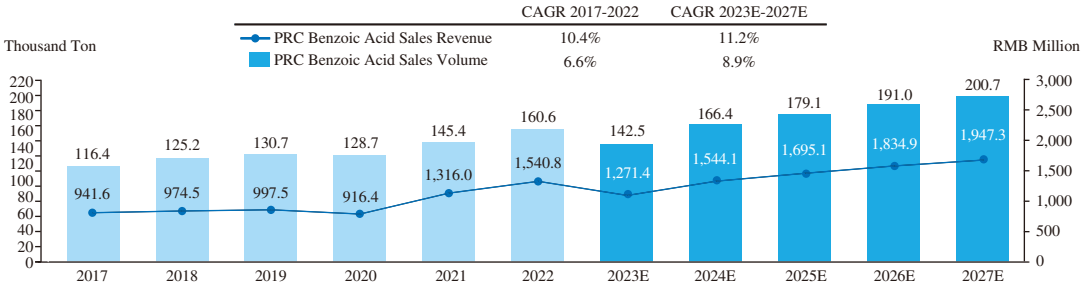
Antibiotic-treated animals has been banned from production globally because countries and international organizations gradually call for less use of antibiotics in healthy animals for growth promotion and disease prevention. The reduction in antibiotics will largely lead to the increase in sales of benzoic acid. With increasing needs for downstream products such as non-phthalate plasticizers, the global sales volume of benzoic acid is estimated to reach 345.2 thousand tons in 2027 from 255.8 thousand tons in 2023, representing a CAGR of 7.8%. The global sales revenue of benzoic acid is estimated to reach RMB3,014.5 million in 2027 from RMB2,054.1 million in 2023, representing a CAGR of 10.1%. The PRC sales volume of benzoic acid is expected to reach 200.7 thousand tons in 2027 with a CAGR of 8.9% from 2023, and the sales revenue is expected to reach RMB1,947.3 million in 2027 from RMB1,271.4 million in 2023, with a CAGR of 11.2%.

Global Sales Volume and Sales Revenue of Benzoic Acid, 2017-2027E



Source: Frost & Sullivan Report

The PRC Sales Volume and Sales Revenue of Benzoic Acid, 2017-2027E



Source: Frost & Sullivan Report

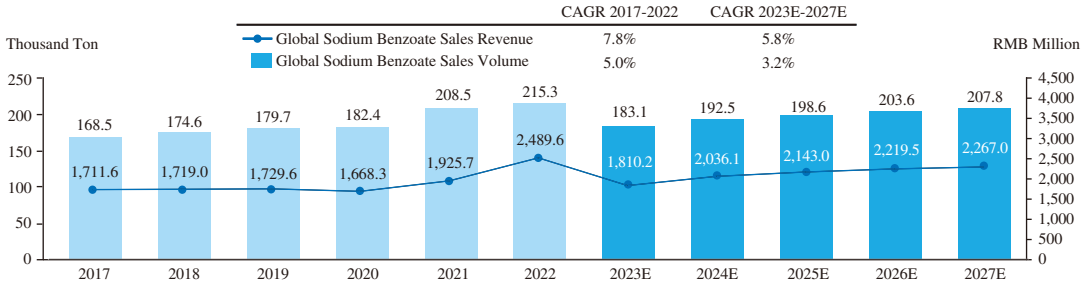
Global and the PRC Sales Volume and Sales Revenue of Sodium Benzoate

Global sodium benzoate production capacity is estimated to increase from approximately 330.0 thousand tons in 2022 to 342.7 thousand tons in 2027, benefiting from leading companies' insight into downstream demand and outstanding capacity expansion layouts. The global sales volume of sodium benzoate increased from approximately 168.5 thousand tons in 2017 to approximately 215.3 thousand tons in 2022, representing a CAGR of 5.0%.

Correspondingly, the global sales revenue of sodium benzoate slightly increased from approximately RMB1,711.6 million in 2017 to approximately RMB2,489.6 million in 2022, representing a CAGR of 7.8%. During the same period, the sales volume of the PRC sodium benzoate increased from 75.2 thousand tons to approximately 113.3 thousand tons, representing a CAGR of 8.5%. The PRC sales revenue increased slowly from RMB848.8 million to RMB1,456.2 million.

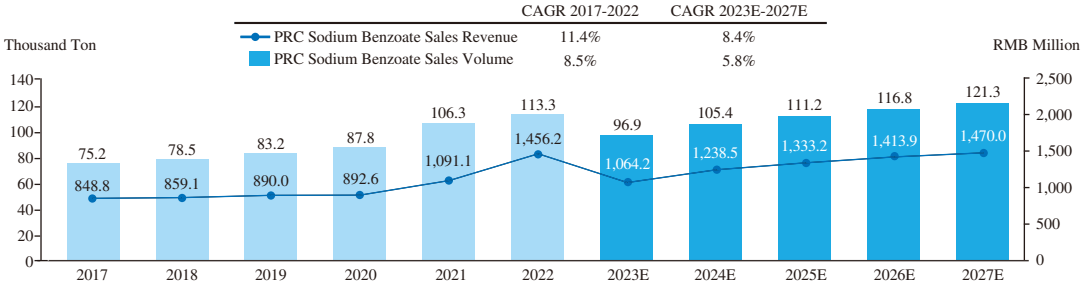
Driven by the increasing demands from downstream markets such as personal care market, both sales volume and revenue of sodium benzoate are expected to further expand over the forecast period. The global sales volume of sodium benzoate is estimated to reach 207.8 thousand tons in 2027 from 183.1 thousand tons in 2023, with a CAGR of 3.2% over the prediction period. The global sales revenue of sodium benzoate is estimated to reach RMB2,267.0 million in 2027 from RMB1,810.2 million in 2023, with a CAGR of 5.8% over the prediction period. The PRC sales volume of sodium benzoate is estimated to reach 121.3 thousand tons in 2027 from 96.9 thousand tons in 2023, with a CAGR of 5.8% over the prediction period. The PRC sales revenue of sodium benzoate is estimated to reach RMB1,470.0 million in 2027 from RMB1,064.2 million in 2023, with a CAGR of 8.4% over the prediction period.

Global Sales Volume and Sales Revenue of Sodium Benzoate, 2017-2027E



Source: Frost & Sullivan Report

The PRC Sales Volume and Sales Revenue of Sodium Benzoate, 2017-2027E



Source: Frost & Sullivan Report

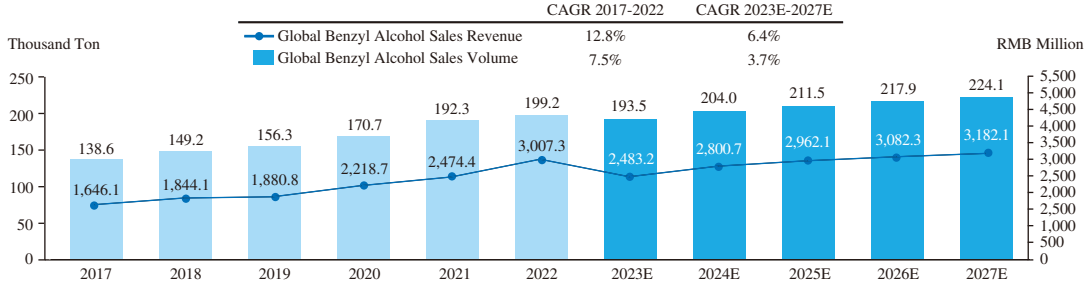
Global and the PRC Sales Volume and Sales Revenue of Benzyl Alcohol

In 2022, the global production capacity of benzyl alcohol reached 256.0 thousand tons. The global sales volume of benzyl alcohol increased from approximately 138.6 thousand tons in 2017 to approximately 199.2 thousand tons in 2022, representing a CAGR of 7.5%. The global sales revenue of benzyl alcohol increased from approximately RMB1,646.1 million in 2017 to approximately RMB3,007.3 million in 2022, representing a CAGR of 12.8%. During

the same period, the sales volume of the PRC benzyl alcohol increased from approximately 73.8 thousand tons in 2017 to approximately 109.4 thousand tons in 2022, representing a CAGR of 8.2%. The PRC sales revenue increased from approximately RMB947.5 million in 2017 to approximately RMB1,783.7 million in 2022, representing a CAGR of 13.5%.

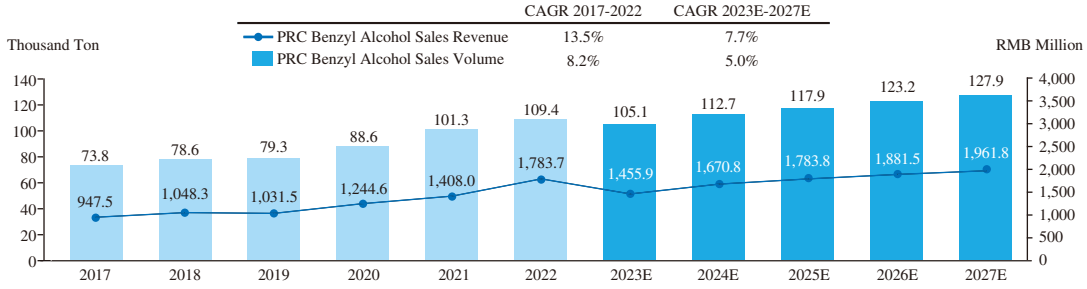
Driven by the global economic recovery and the increasing application and use of benzyl alcohol, especially in pharmaceuticals, consumer electronics, additive materials, and home improvement industries, the global sales volume of benzyl alcohol is estimated to reach 224.1 thousand tons in 2027 from 193.5 thousand tons in 2023, representing a CAGR of 3.7%. The global sales revenue of benzyl alcohol is estimated to reach RMB3,182.1 million in 2027 from RMB2,483.2 million in 2023, representing a CAGR of 6.4%. It is expected that PRC sales volume of benzyl alcohol will increase from 105.1 thousand tons in 2023 to 127.9 thousand tons in 2027, with a CAGR of 5.0% over the prediction period. The PRC sales revenue of benzyl alcohol is estimated to reach RMB1,961.8 million in 2027.

Global Sales Volume and Sales Revenue of Benzyl Alcohol, 2017-2027E



Source: Frost & Sullivan Report

The PRC Sales Volume and Sales Revenue of Benzyl Alcohol, 2017-2027E



Source: Frost & Sullivan Report

In 2023, influenced by factors including the slowdown of global economic growth, reduced demand from downstream inventory replenishment, and market structural adjustments due to geopolitical factors, crude oil prices dropped from high price level. Decrease in crude oil prices reduced the cost support for downstream products, resulting in the decline in prosperity of markets for benzoic acid, sodium benzoate, and benzyl alcohol. Therefore, industry players adjusted capacity utilization rates to adapt to the low expectation of demand. Leading enterprises in the industry, benefiting from relatively stable customer support, experienced marginal decline in capacity utilization rates compared to that of smaller factories. Consequently, it is expected that both sales volume and sales revenue of benzoic acid, sodium benzoate, and benzyl alcohol will undergo significant contraction in 2023.

In 2024, considering the business cycle, downstream industries of benzoic acid, sodium benzoate, and benzyl alcohol are gradually increasing their demand for replenishing stocks. Simultaneously, recovery of the domestic and international economies will drive consumption resurgence. With the further improvement in profit expectations, the capacity utilization rates of major industry players will rise gradually. Therefore, the benzoic acid, sodium benzoate, and benzyl alcohol markets are expected to rebound in both sales volume and sales revenue in 2024.

Key Market Drivers and Trends

- **Rising demand from traditional and emerging downstream industries**

The toluene and toluene derivative products have been widely used in the downstream including food and beverage market, industrial market, feed additive market, pesticide intermediate market, and pharmaceutical intermediate market etc. Due to changes in the consumer preferences for packaged food items and drinks and increased per capita income, the demand for preservative is growing. The market size of global food preservative market is expected to reach USD4.1 billion in 2028, and is expected to increase at a CAGR of 4.0% from 2024 to 2028. The growing food preservative market is driving the growth of the toluene and toluene derivative products industry. The PRC market size for the feed additives industry by revenue has increased from RMB94.4 billion in 2018 to RMB122.3 billion in 2023, representing a CAGR of 5.3%, which is expected to reach RMB160.4 billion in 2028 with a CAGR of 6.0% from 2024. Feed acidifier is also an important downstream product of toluene derivatives. The new high-efficiency, non-polluting, non-residual feed additives are becoming increasingly popular along with probiotics, enzymes, fragrances, and other new green feed additives. The market for feed acidifiers with the substitution effect is expected to explode. In addition to the use in traditional industries, the downstream applications for daily chemical products which are well-crafted and enjoy personal care effectiveness are also increasing. Benzoic acid ammonification products mainly comprise benzonitrile and benzoguanamine, which is used as pharmaceutical intermediate. The PRC market size of pesticide intermediates and pharmaceutical intermediates have reached RMB39.3 billion and RMB46.7 billion in 2023 and is expected to reach RMB44.9 billion and RMB70.5 billion in 2028, representing CAGRs of 2.2% and 8.8% from 2024 respectively. Benefiting from the increasing demand from downstream pesticide intermediate and pharmaceutical intermediate markets, the future market demand for benzoic acid ammonification products is expected to grow.

- **Favorable and long-term effective regulations and policies**

The PRC government has been taking actions to plan and support the development of toluene and toluene derivative products industry and related downstream industries which utilize toluene derivative products including food additives, food preservative and feed additives. According to the Announcement No. 194 of the Ministry of Agriculture and Rural Affairs of the People's Republic of the PRC issued on July 9, 2019, starting from July 1, 2020, feed manufacturers will stop producing commercial feed containing growth-promoting drug feed additives (except traditional Chinese medicine), which promote the development of functional feed additives. The past few years have witnessed a more stringent and comprehensive regulation of the food and beverage preservative industry in the PRC. In 2019, The Regulation on the Implementation of the Food Safety Law of the People's Republic of the PRC《中華人民共和國食品安全法實施條例》was released by the State Council, which proposed to establish food safety risk evaluation mechanism and assess risks in terms of the

biological, chemical and physical impact of food additive and related products. In 2021, in order to provide a scientific basis for developing cosmetic quality and safety risk control measures and standards, and conducting cosmetic sampling and testing, the National Cosmetic Safety Risk Monitoring Plan for the second half of 2021(《2021年下半年國家化妝品安全風險監測計劃》) has been issued by the National Medical Products Administration. Tightening regulations will further promote the development of relevant industries where the toluene and toluene derivative products are used. In 2022, Notice on Issuing the "14th Five-Year Plan" for Promoting Agricultural and Rural Modernization (《關於印發"十四五"推進農業農村現代化規劃的通知》) specifies, by 2025, the utilization rates of pesticides for major crops will reach over 43% from 40.6% in 2020. This measure represents to accelerate the adoption of low-toxic and low-residue pesticides, promoting the usage of pesticide intermediates with low environmental pollution and increasing the demand for toluene and toluene-derived chemicals.

- **Improvement of manufacturing technology**

It is expected that the toluene and toluene derivative products industry will keep improving technologies as major producers are devoted to innovations and advancement of their production method, synthesizing process, and catalyst preparation technology. Continuous innovation and improvement of production techniques, automation, and information technology have direct influence on product quality. For example, Our Group has independently developed an innovative method to produce benzoic acid, referred to as the liquid-phase oxidation of toluene with air, which significantly improves the product quality and enhances the capacity. Apart from production efficiency, toluene and toluene derivative products industry participants have also adopted measures and technologies to facilitate energy efficiency and environmental protection to comply with relevant regulations and policies to achieve sustainable development.

Entry Barrier

- **Technology and Talent Threshold**

Maintaining industry competitiveness entail high technology capabilities and high threshold of product quality. In order to achieve these element, toluene and toluene derivative products manufacturers need to establish and maintain sufficient technology and expertise, which constitutes an important technical barrier for new marker participants who lack industry experience. Manufacturers need to spend significant resources to achieve breakthroughs in key technologies and mature applications through independent research and development because the manufacturing process involves complex protocol of manufacturing products and by-products under strict product performance requirements. The higher technology threshold and the demand for experienced technicians constitute the technology and talent barrier to the toluene and toluene derivative products industry.

- **Significant Capital Investment**

Significant capital investment is necessary for the toluene and toluene derivative products manufacturers to gain footing in the industry. The toluene and toluene derivative products manufacturing operations require a large amount of capital for the early procurement of upstream raw material and expensive equipment to produce such chemical products. Moreover, it is costly to continuously improve the production line and enhance the production

techniques to meet the changing demands of downstream markets. Substantial capital is critical for the toluene and toluene-derived chemicals manufacturer to the building and maintaining their leading market position. Therefore, new market participants without sufficient capital are difficult to enter and make competitions in toluene and toluene derivative products industry.

- **Customer Resources and Channels**

One of the foremost concern for the downstream markets of toluene and toluene derivative products industry including food and beverage industry, daily chemical products industry, medical intermediates industry, is product quality and safety. In addition to product quality, leading toluene and toluene derivative products manufacturers commonly establish their own standards to test the quality of supplier's products during raw material procurement process. Once these manufacturers determine a supplier's products meet their standard requirement, the manufacturers usually maintain long term cooperation with these suppliers and rarely seek to replace them. This industry custom and practice is a great advantage of the established supplier and a significant entry barrier for new market participants.

- **Industry Requirements on Safety**

The quality and safety of toluene and toluene derivative are subject to regulatory oversight. Market participants establish complex quality control processes and internal organizational structure in line with industry characteristics to meet these regulatory standards. Leading manufacturers in the toluene and toluene derivative products industry are required to invest significant human and capital resources, set up quality inspection and control departments, configure professional inspection personnel, and build a sound quality control system to accomplish this feat. With the improvement of quality and safety requirements of downstream products, higher requirements are put forward for upstream toluene and toluene-derived chemicals, and higher substantive access barriers in compliance with regulatory requirement which presents as a significant entry barrier.

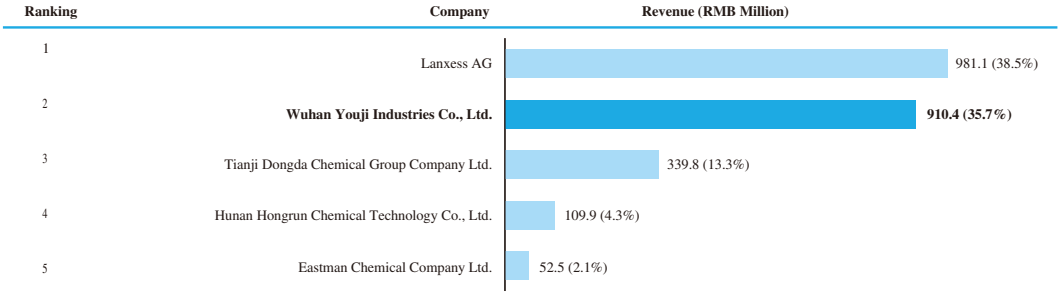
- **Cost Management and Economics of Scale**

The effective cost management and economics of scale will help in generating profit, which is significant for companies' sustainable development. Leading toluene and toluene derivatives providers could leverage their research and development capabilities in product innovation and formula diversification, which enable these enterprises to deliver value added products with excellent quality under properly cost control. Moreover, these enterprises are good at leveraging their long-term industry experience to optimize the production process, and are committed to improving the utilization of by-products and further achieving cost effectiveness, which highlights their long-term development advantages with economics of scale. However, new entrants may lack relevant technical accumulation and industry experience, and also lack the vision in the utilization of by-products and the optimization of production processes, thus forming the cost management and economics of scale barrier.

Competitive Landscape of Global and the PRC Toluene and Toluene Derivative Products Industry

The global sales revenue of benzoic acid in 2022 was approximately RMB2,551.5 million. The global concentration of top five benzoic acid manufacturers increased from 93.3% in 2021 to 93.9% in 2022 in terms of market revenue. In terms of revenue in 2022, our Group ranked second among benzoic acid manufacturers, accounting for 35.7% of the global market revenue.

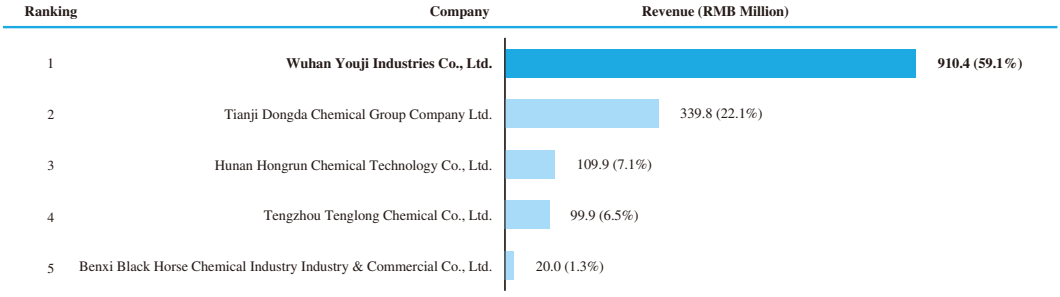
Top Five Player by Revenue in Global Benzoic Acid Market, 2022



Source: Frost & Sullivan Report

The PRC sales revenue of benzoic acid was approximately RMB1,540.8 million in 2022. The PRC benzoic acid market was highly concentrated among the top five benzoic acid manufacturers, whose aggregate market share in terms of revenue was 96.1% in 2022. Our Group ranked first among benzoic acid manufacturers in terms of revenue, accounting for 59.1% of the PRC market revenue.

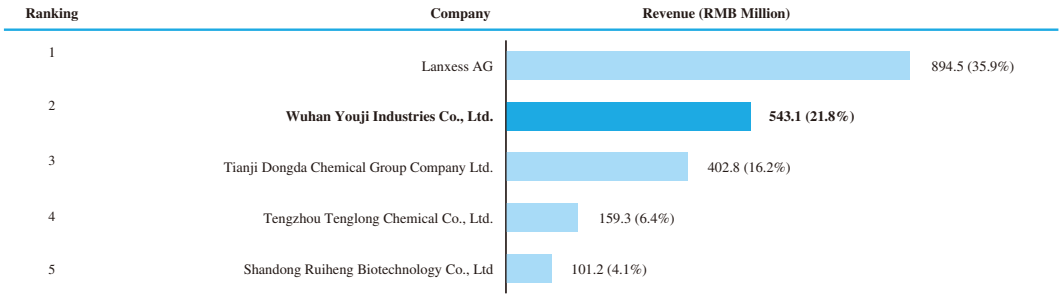
Top Five Player by Revenue in the PRC Benzoic Acid Market, 2022



Source: Frost & Sullivan Report

The global sales revenue of sodium benzoate in 2022 was approximately RMB2,489.6 million. The global concentration of top five sodium benzoate manufacturers increased from 79.1% in 2021 to 84.4% in 2022 in terms of market revenue. In terms of revenue in 2022, our Group ranked second among sodium benzoate manufacturers, accounting for 21.8% of the global market revenue.

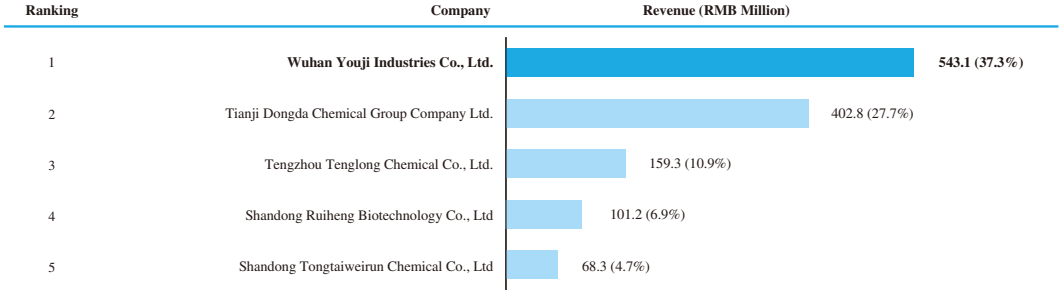
Top Five Player by Revenue in Global Sodium Benzoate Market, 2022



Source: Frost & Sullivan Report

The PRC sales revenue of sodium benzoate was approximately RMB1,456.2 million in 2022. The PRC sodium benzoate market was highly concentrated among the top five sodium benzoate manufacturers, whose aggregate market share in terms of revenue was 87.5% in 2022. Our Group ranked first among sodium benzoate manufacturers in terms of revenue, accounting for 37.3% of the PRC market revenue.

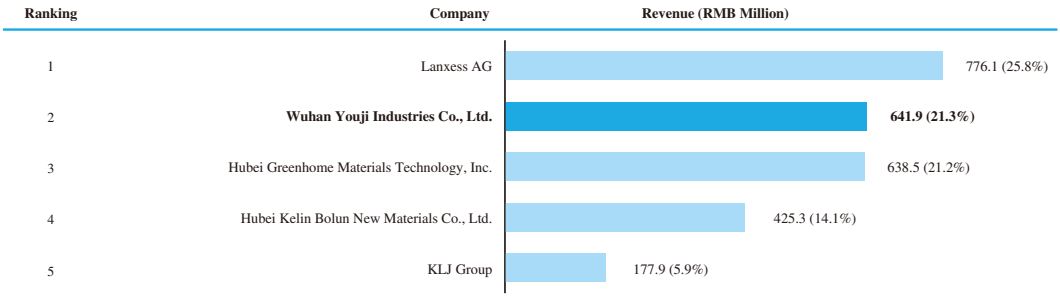
Top Five Player by Revenue in the PRC Sodium Benzoate Market, 2022



Source: Frost & Sullivan Report

The market size of global benzyl alcohol market reached approximately RMB3,007.3 million in 2022. The global concentration of top five benzyl alcohol manufacturers increased from 76.8% in 2021 to 88.3% in 2022 in terms of market revenue. In 2022, our Group ranked second among benzyl alcohol manufacturers in terms of revenue, accounting for 21.3% of the global market revenue. Our Group is the largest benzyl alcohol manufacturer in the PRC in terms of sales revenue.

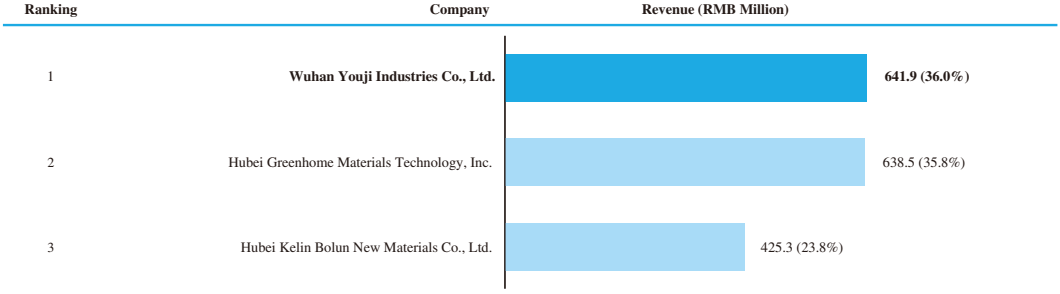
Top Five Player by Revenue in Global Benzyl Alcohol Market, 2022



Source: Frost & Sullivan Report

The PRC sales revenue of benzyl alcohol was approximately RMB1,783.7 million in 2022. The PRC benzyl alcohol market was highly concentrated among the top three benzyl alcohol manufacturers, whose aggregate market share in terms of revenue was 95.6% in 2022. Our Group ranked first among benzyl alcohol manufacturers in terms of revenue, accounting for 36.0% of the PRC market revenue.

Top Three Player by Revenue in the PRC Benzyl Alcohol Market, 2022



Note: Other market players in the PRC benzyl alcohol market have a minimal market share of less than 2% respectively.

Source: Frost & Sullivan Report

In 2023, major global and the PRC market players in benzoic acid, sodium benzoate and benzyl alcohol markets faced severe challenges on revenue and profit arising from the slower-than-expected economic recovery caused by COVID-19 and downward trend of raw material prices. Entities in the PRC chemical materials and manufacturing industry has recorded a significant drop in net profit in 2023 as compared to 2022, but the drop has been narrowing throughout the period according to the statistics issued by National Bureau of Statistics.

Notes:

1. LANXESS Chemical Company Ltd. is a listed Germany company which primarily engages in the production of advanced intermediate, additives and specialty chemicals.

2. Tianji Dongda Chemical Group Company Ltd. is an unlisted Chinese company which primarily engages in the production of benzoic acid, sodium benzoate, benzyl benzoate and polyol benzoate.

3. Benxi Black Horse Chemical Industry Industry & Commercial Co., Ltd. is an unlisted Chinese company which primarily engages in the production of benzoic acid, sodium benzoate and potassium sorbate.

4. Eastman Chemical Company Ltd. is a listed U.S. company which primarily engages in the production of advanced materials, additives, specialty chemicals and fibers.

5. Hubei Greenhome Materials Technology, Inc. is an unlisted Chinese company which primarily engages in the production of benzyl chloride, benzaldehyde and benzyl alcohol.

6. Hubei Kelin Bolun New Materials Co., Ltd. is an unlisted Chinese enterprise that engages in the research, production and marketing of benzyl alcohol products.

7. KLJ Group is an unlisted Indian company which primarily engages in the production of plasticizers, benzyl alcohol and polymer compounds.

8. Hunan Hongrun Chemical Technology Co., Ltd. is an unlisted Chinese enterprise engaged in fine chemical products such as benzoic acid, benzaldehyde, benzoate, etc.

9. Tengzhou Tenglong Chemical Co.,Ltd. is an unlisted Chinese enterprise for food-antiseptic products such as benzoic acid, sodium benzoate, and potassium benzoate.

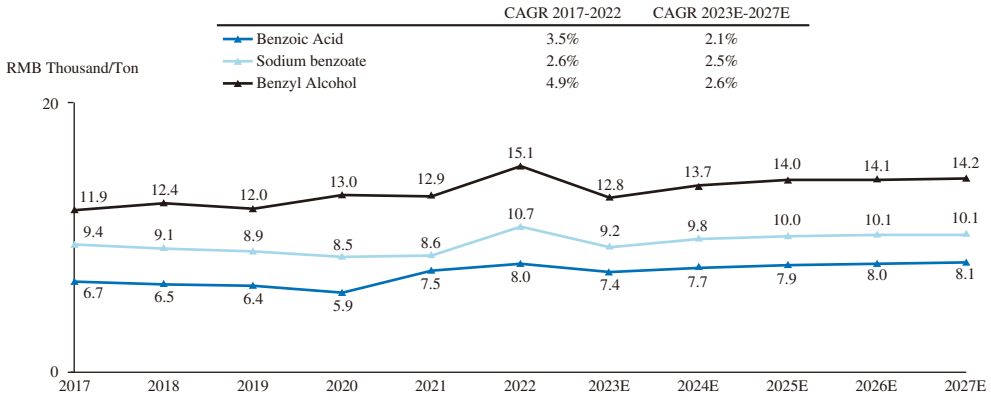
10. Shandong Ruiheng Biotechnology Co., Ltd is an unlisted Chinese enterprise that produces sodium benzoate, calcium propionate, benzoic acid , calcium acetate in China.

11. Shandong Tongtaiweirun Chemical Co., Ltd is an unlisted Chinese enterprise specializes in the production of food grade, pharmaceutical grade, feed grade propionate.

MAJOR TOLUENE AND TOLUENE DERIVATIVE PRODUCTS AND RAW MATERIAL AND COST ANALYSIS

The average unit price of benzoic acid increased from RMB6.7 thousand per ton in 2017 to RMB8.0 thousand per ton in 2022 at a CAGR of 3.5%, with a fluctuation between 2020 and 2021 due to the multiple effects of robust downstream market demand and a shortage of raw material supply due to the COVID-19. The prices of sodium benzoate and benzyl alcohol represented relatively steady trend between 2017 to 2021, which reached RMB8.6 thousand per ton and RMB12.9 thousand per ton in 2021 respectively. The prices of these three products have seen dramatic growth in 2022, which was mainly because of the outstanding growth of toluene and brent crude oil. Looking forward, the average unit price of benzoic acid, sodium benzoate, and benzyl alcohol will represent a slight drop in 2023 and then maintain a steady increasing trend from 2024, reaching RMB8.1 thousand per ton, RMB10.1 thousand per ton, and RMB14.2 thousand per ton respectively in 2027. The average unit price of toluene chloride maintained a steady increasing trend in 2019, 2020, and 2021, which was RMB6,165.5 per ton, RMB6,467.7 per ton, RMB7,303.9 per ton respectively.

Average Unit Price of Benzoic Acid, Sodium Benzoate and Benzyl Alcohol, 2017-2027E

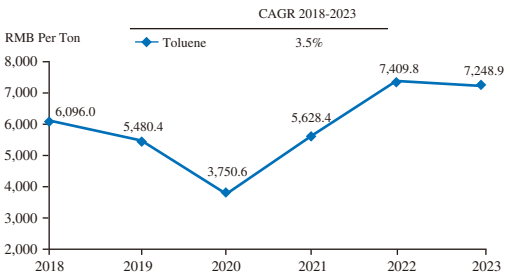


Source: Frost & Sullivan Report

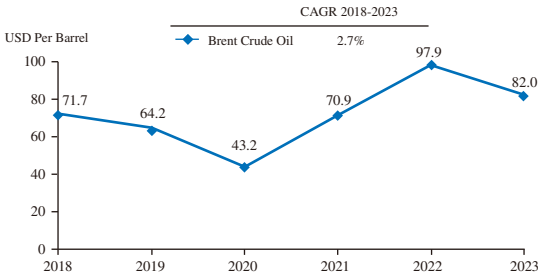
Brent crude oil is a major trading product and serves as a benchmark for purchases on global financial markets. The price of brent crude oil is normally affected by numerous factors including the balance between supply and demand, geopolitics, the intervention of organizations like OPEC and economic policies. In 2020, responses to the COVID-19 pandemic led to steep declines in global petroleum demand and to volatile crude oil markets and brent crude oil fell to USD43.2/barrel. The demand of crude oil continues to recover, and the price of brent crude oil has reached USD70.9/barrel in 2021 and subsequently USD97.9/barrel in 2022. In 2023, the average unit price of brent crude oil dropped to USD82.0/barrel. Slowdown of global economic recovery, rising oil output from non-OPEC countries, and global interest rate hike have led to downward fluctuations in oil price in 2023. Geopolitical concerns and economic sanctions restrict the global trade and increase the costs of production, business operations, and financing, resulting in the slowdown of global economic recovery. Also, due to significant production volume increases in non-OPEC countries such as the United States, the overall global oil industry supply surplus has been exacerbated, lowering the oil price. Further, major global economies are implementing monetary policies of raising interest rates to curb inflation, leading to a deceleration in the growth of demand for oil and drop in oil price.

In general, the price of international crude oil is positively correlated with the average price of toluene as oil is one of indispensable raw materials. The price of toluene decreased from RMB6,096.0 per ton in 2018 to RMB3,750.6 per ton in 2020. In 2020, due to the slump in oil consumption, stock accumulation of refined oil products and shrinking demands of oil blending, the average price of toluene decreased by 31.6%. The market price of toluene was on a fluctuated but overall upwards trend in 2021. As the oil price continues to increase, the price of toluene demonstrates similar trend and has reached RMB7,409.8 per ton in 2022. In 2023, drop in the average prices of brent crude oil led to the decrease in the average unit price of toluene to RMB7,248.9 per ton. Due to the drop in oil prices, toluene, as the product of the petroleum refining process, lacked sufficient cost support and demand from downstream markets, leading to a slight drop in its average price in 2023, resulting in the decrease of the average unit price of benzoic acid, sodium benzoate and benzyl alcohol in the corresponding period.

Average Unit Prices of Toluene (the PRC), 2018-2023



Average Unit Prices of Brent Crude Oil, 2018-2023



Source: Frost & Sullivan Report

By leveraging strong research and development and manufacturing capabilities, our Group has become a market top-ranked manufacturer of the production of toluene and toluene derivative products and maintained a leading position in the industry. Meanwhile, the experienced management teams with in-depth industry knowledge enable us to develop new products and formulas in line with the industry trends. By developing a rich and diverse product portfolio, our Group can satisfy the demand of various downstream industries. In addition, our Group have established a comprehensive distribution network, and have built a strong and cohesive customer mix from a wide range of industries in both the PRC and the international market.