The information contained in this section and elsewhere in this document have been derived from various official government and other publications generally believed to be reliable and the Frost & Sullivan Report which we commissioned. We believe that the sources of such information and statistics are appropriate sources for such information and have taken reasonable care in extracting and reproducing such information. We have no reason to believe that such information is false or misleading in any material respect or that any fact has been omitted that would render such information false or misleading in any material respect. None of our Company, the Sole Sponsor, [REDACTED] and any of the Relevant Persons (which, for the purpose of this paragraph, excludes Frost & Sullivan) has independently verified such information and statistics and none of them gives any representation as to the accuracy of such information and statistics. Further, we cannot assure you that they are stated or compiled on the same basis or with the same degree of accuracy (as the case may be) in other jurisdictions. As a result, you should not unduly rely upon such facts and statistics contained in this document.

SOURCE OF INFORMATION

We commissioned Frost & Sullivan, an independent market research and consulting firm, to conduct an analysis of, and to prepare a report on the global and the PRC pigment, pearlescent pigment and mica markets. The report prepared by Frost & Sullivan for us is referred to in this document as the Frost & Sullivan Report. We have agreed to pay Frost & Sullivan a fee of RMB0.5 million which we believe reflects market rates for reports of this type.

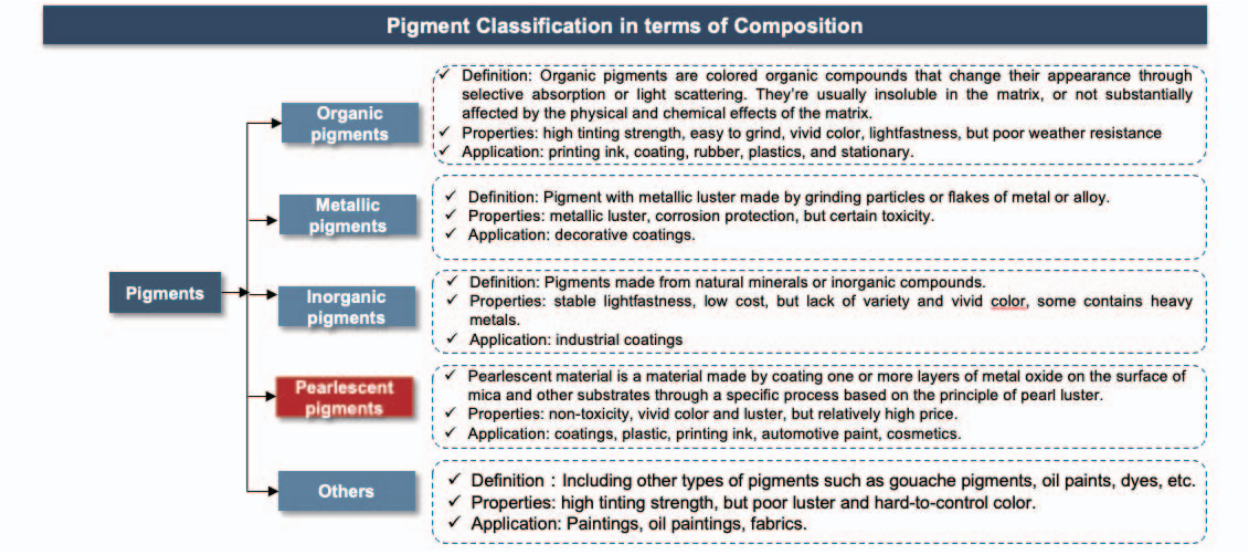
Founded in 1961, Frost & Sullivan has 40 offices with more than 2,000 industry consultants, market research analysts, technology analysts and economists globally. Frost & Sullivan's services include technology research, independent market research, economic research, corporate best practices advising, training, client research, competitive intelligence and corporate strategy.

We have included certain information from the Frost & Sullivan Report in this document because we believe this information facilitates an understanding of the global and the PRC pigment, pearlescent pigment and mica markets for the prospective investors. Frost & Sullivan's independent research consists of both primary and secondary research obtained from various sources in respect of the global and the PRC pigment, pearlescent pigment and mica markets. Primary research involved in-depth interviews with leading industry participants and industry experts. Secondary research involved reviewing company reports, independent research reports and data based on Frost & Sullivan's own research database. Projected data were obtained from historical data analysis plotted against macroeconomic data with reference to specific industry-related factors. Except as otherwise noted, all of the data and forecasts contained in this section are derived from the Frost & Sullivan Report, various official government publications and other publications.

In compiling and preparing the research, Frost & Sullivan assumes that the social, economic and political environments in the relevant markets are likely to remain stable in the period during which Frost & Sullivan has made estimates, which ensures stable and healthy development of the global and the PRC pigment, pearlescent pigment and mica markets.

Our Directors 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 an impact on the information therein.

OVERVIEW OF THE GLOBAL PIGMENT MARKET



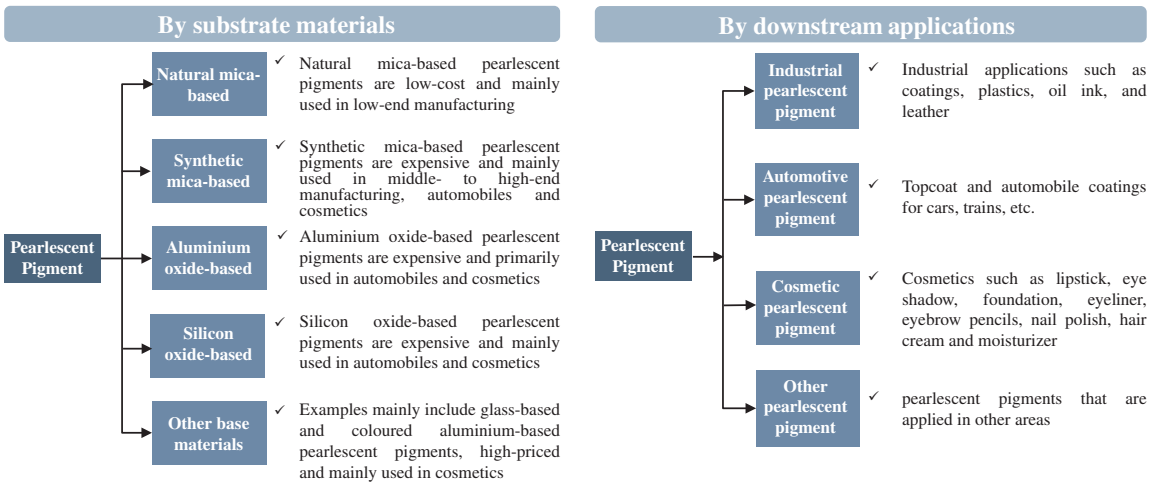
Source: Frost & Sullivan

Compared to other pigments, such as organic pigments, metallic pigments, inorganic pigments and others, pearlescent pigments have superior properties such as good lustre, decent decorative finish, non-toxicity, strong lightfastness, heat resistance and chemical stability. Hence, pearlescent pigments can apply in a wide range of industries and is expected to replace other pigments gradually in the future.

OVERVIEW OF THE GLOBAL PEARLESCENT PIGMENT MARKET

Classification of pearlescent pigment products

The diagram below illustrates different types of pigment in terms of their composition, properties and applications:



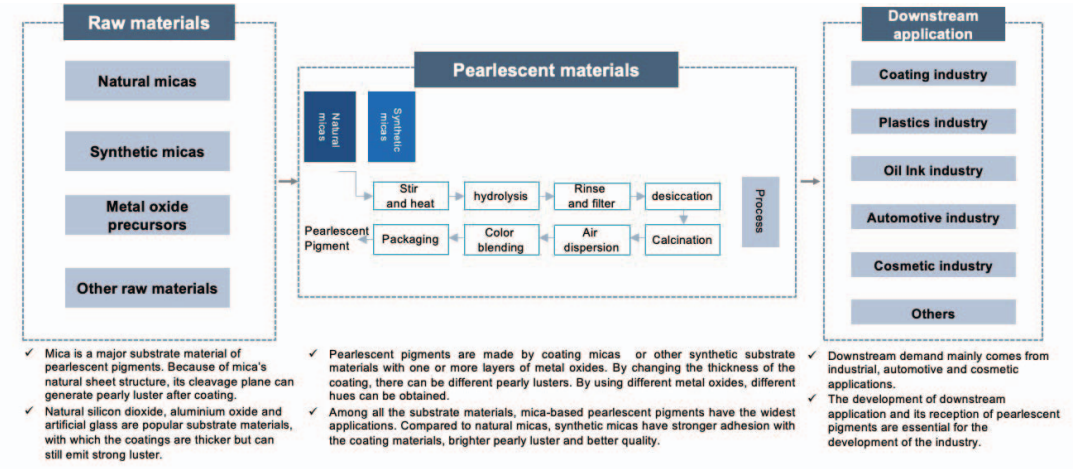
Source: Frost & Sullivan

Pearlescent pigment is an optical pigment. Based on how pearls generate lustre, pearlescent pigments are made by coating micas with one or more layers of metal oxide through special techniques.

Substrate materials of pearlescent pigments include natural micas, synthetic micas, aluminium oxides, silicon oxides and glass. Pearlescent pigments are widely applied in manufacturing, automobile and cosmetics.

Value Chain of Pearlescent Pigments Industry

The pearlescent pigment producers are the major participants in the industry. At present, downstream customers in the pearlescent pigments industry mainly include direct customers (such as cosmetics manufacturers, automotive paint manufacturers, etc.) and pearlescent pigments trading companies. Pearlescent pigments trading companies are more inclined to cooperate with larger pearlescent pigments manufacturers due to its rich product variety and better cost price control.



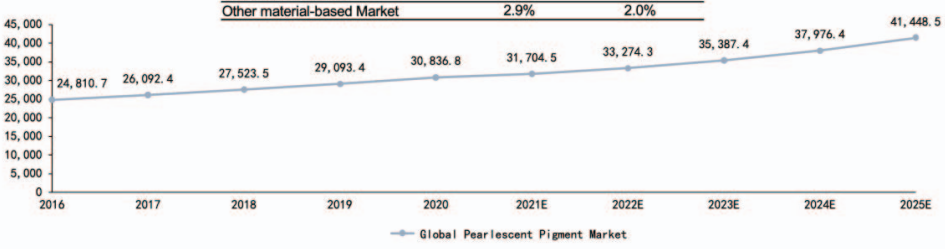
Source: Frost & Sullivan

Average selling prices of pearlescent pigment products

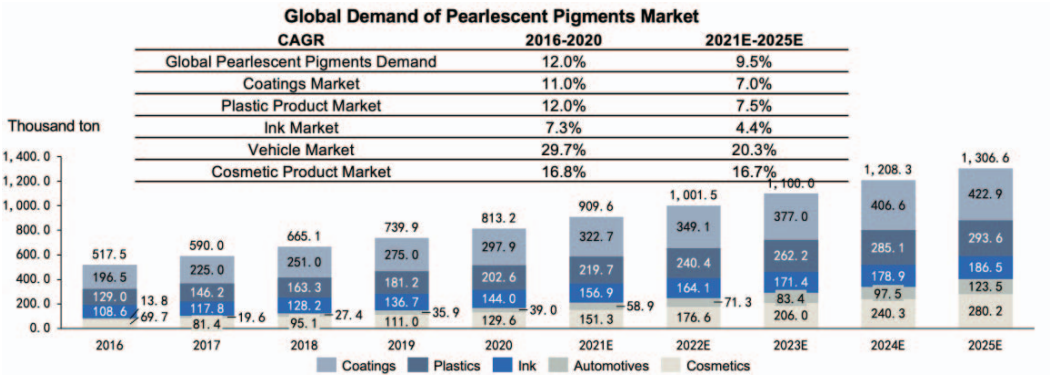
Recently, owing to progress in pearlescent pigments technology and growing market demand for pigments products of better quality, the price of pearlescent pigments are rising. The product and pricing structure continuously optimise, leading to increasing profitability. From 2016 to 2020, the price of global pearlescent pigments increased from RMB 26,092.4 per tonne to RMB 31,932.0 per tonne, representing a CAGR of 5.2%. With future advancements of production techniques in pearlescent pigments and raw material (such as synthetic micas), the global pearlescent pigments will improve in quality, profitability and penetration rate in various application scenarios. It is estimated that the price of global pearlescent pigments will rise to RMB44,673.3 per tonne with a CAGR of 6.9% from 2021 to 2025.

Pricing Analysis of Global Pearlescent Pigments Market (2016-2025E)

CAGR	2016-2020	2021E-2025E
Global Pearlescent Pigment Market	5.2%	8.8%
Natural Mica-based Market	2.7%	2.1%
Synthetic Mica-based Market	3.0%	3.8%
Aluminium Oxide-based Market	2.0%	0.5%
Silicon Oxide-based Market	2.1%	0.5%
Glass-based Market	3.2%	2.7%
Other material-based Market	2.9%	2.0%



Source: Frost & Sullivan, China Non-metallic Mineral Information Platform, U.S. Geological Survey, India Bureau of Mines, OECD, Expert Interview



Source: Frost & Sullivan, Organisation Internationale des Constructeurs d'Automobiles, World Paint & Coatings Industry Association, Expert Interview

First of all, the premium product quality is one of the reasons for the increasing market demand. The Group's well-designed production facilities and proprietary production technologies also contribute to the improvements in the quality of the Group's synthetic mica-based pearlescent pigment products, which drives the customers to try using the synthetic mica-based pearlescent pigments instead of other pigment products. Also, as the natural mica minerals are becoming depleted due to continual exploitation and the production of synthetic mica-based pearlescent pigments is clean and environmentally friendly, Frost & Sullivan believes that the synthetic mica-based pearlescent pigment products will be increasingly popular.

Second, as the applications of the synthetic mica accelerate, the market competition in the industry is increasing. Small and medium-sized manufacturers are expected to be weeded out by larger manufacturers, which increases the market concentration. Large manufacturers which have outstanding production technologies and established market position, like Chesir Pearl, are expected to attract more demand for the pigment products.

Third, pricing power is also another reason for the Company to be able to attract increasing market demand for the Company's synthetic mica-based pearlescent pigment products. Economies of scale will also improve profitability and production efficiency. Advantages in the production capacity also gives mica producers certain pricing power and ability to guarantee a stable supply. Thus, companies which enjoy the economies of scale could receive sufficient market demand from the existing customers and new customers in the future.

In recent years, the application and demand of pearlescent pigments have shown a trend of rapid growth. The 2016-2020 CAGR reached 12.0%, and the global demand reached 813.2 thousand tons in 2020. Because of its characteristics of safety, non-toxicity, pollution-free, and bright colours, pearlescent pigments have a high substitution effect in the downstream market, and the future market space is huge. Among them, industrial-grade pearlescent pigments account for about 84.0% of the total demand. The emergence of synthetic mica pearlescent pigments has greatly expanded the market share of pearlescent materials in coatings and inks industry. In the high-end market, as the penetration rate of pearlescent pigments in the vehicle industry continues to increase, the CAGR of demand for vehicle-used pearlescent pigments is the highest of all downstream markets, reaching 29.7%. The demand for cosmetic-grade pearlescent pigments has a CAGR of 16.8%. The booming beauty industry has effectively stimulated the demand for pearlescent materials.

It is expected that the global demand for pearlescent materials will sustain the growth from 2021 to 2025. It is estimated that the total global demand in 2025 will reach 1,306.6 thousand tons. The potential substitution effect and increased penetration rate will allow the pearlescent material market to remain optimistic in the future. Global demand for the pearlescent pigments is expected to maintain a sustainable growth based on the pivotal assumptions as follows: (i) the broad-based availability of an effective vaccine could allow containment policies and mobility in most countries to normalize gradually and should allow a meaningful economic rebound in 2021 and 2022. For example, countries such as the UK, the USA, Canada, Germany and Japan are preparing to launch large-scale vaccine injection plans in an attempt to control the COVID-19 pandemic. (ii) a majority of economies have launched supportive government policies such as loans with low interest rate, employment subsidies and other funding schemes, which are expected to contribute to the global economic recovery; (iii) in China, as the COVID-19 pandemic has been gradually under control since March 2020 and both the

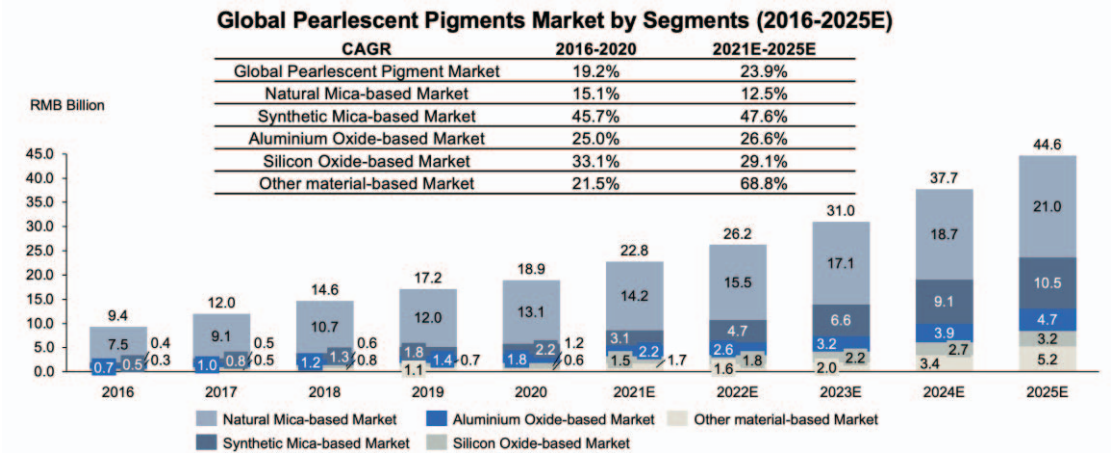
upstream and downstream manufacturers as well as logistics companies have gradually resumed operation, the domestic demand has picked up gradually since March 2020; (iv) The availability of self-developed effective vaccine is expected to further control the transmission of COVID-19 and promote the economic recovery nationwide; (v) GDP per capita in China in 2019 exceeded USD10.0 thousand and the GDP exceeded RMB100.0 trillion, which will further contribute to the recovery of domestic consumer market; (vi) the central government have issued a series of notice such as *Implementation Opinions on Promoting the Expansion and Quality of Consumption and Accelerating the Formation of a Strong Domestic Market*(《關於促進消費擴容提質加快形成強大國內市場的實施意見》)in an attempt to create a better environment for consumption. The regional government also took various measures to encourage consumption. For example, the Foshan government launched policy to encourage the purchase of "National VI" cars, providing subsidies of 2,000-5,000 yuan per car; (vii) the population of e-commerce channels and the popularity of live streaming helped to boost the recovery of home appliance industry, which is also one of the pivotal downstream users of industrial-grade pearlescent pigments; (viii) according to *Outline of the Fourteenth Five-Year Plan for the National Economic and Social Development of the People's Republic of China*(《中華人民共和國國民經濟和社會發展第十四個五年規劃綱要》),manufacturing is one of the focal industries for economic development, and the development of advanced manufacturing is encouraged. (ix) The urbanization rate in China has witnessed a sustainable growth from 56.1% in 2015 to 60.6% in 2019. Driven by the favourable policies such as The State Council on Issuing the National Population Development Plan(2016-2030)(《國務院關於印發國家人口發展規劃(2016-2030年)》), the urbanization rate in China is expected to reach 65.7% in 2024.The rising urbanization rate is expected to provide more market opportunities for the manufacturing, the pearlescent pigments as well as the mica products industry in the PRC despite the COVID-19 pandemic.

Market size of the global pearlescent pigment market

The global pearlescent pigments market showed stable growth in the last few years, reaching RMB 18.9 billion in 2020 with a CAGR of 19.2% from 2016 to 2020. With consumption upgrade and pearlescent pigments gradually replace other pigments, Frost & Sullivan estimates that the global pearlescent pigments market will grow at a CAGR of 23.9% from 2021 to 2025 and reach RMB44.6 billion in 2025. For synthetic mica-based pearlescent materials, as people's recognition and acceptance of synthetic mica-based pearlescent materials will increase in the future, and people's consumption levels will gradually increase, synthetic mica-based pearlescent materials will be used in various application fields and hence its market share will realise a sustainable growth. The market share of synthetic mica-based pearlescent pigments increased from 5.3% in 2016 to 11.7% in 2020. Driven by the advancing technologies and production of synthetic mica, the market share of synthetic mica-based pearlescent pigments in the global market is expected to reach 23.6% in 2025.

Global Pearlescent Pigments Market by Segments (2016-2025E)

CAGR	2016-2020	2021E-2025E
Global Pearlescent Pigment Market	19.2%	23.9%
Natural Mica-based Market	15.1%	12.5%
Synthetic Mica-based Market	45.7%	47.6%
Aluminium Oxide-based Market	25.0%	26.6%
Silicon Oxide-based Market	33.1%	29.1%
Other material-based Market	21.5%	68.8%

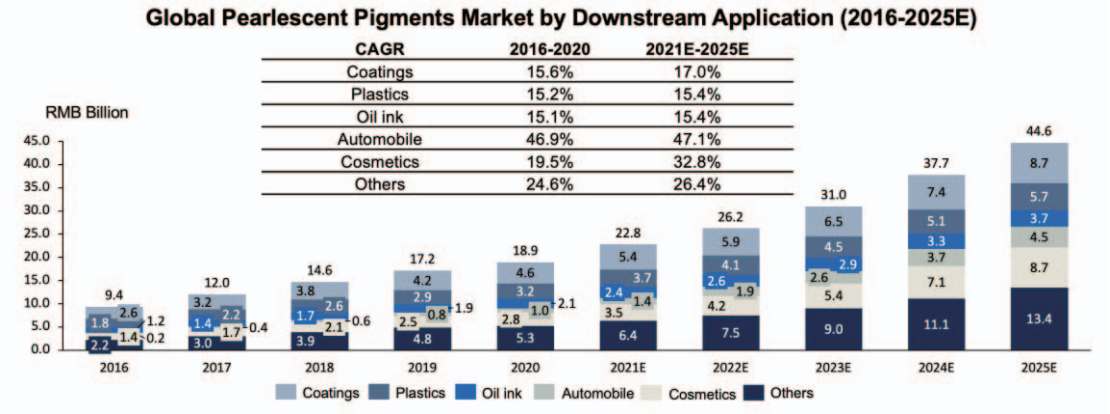


Source: Frost & Sullivan, China Non-metallic Mineral Information Platform,U.S. Geological Survey, India Bureau of Mines, OECD, Expert Interview

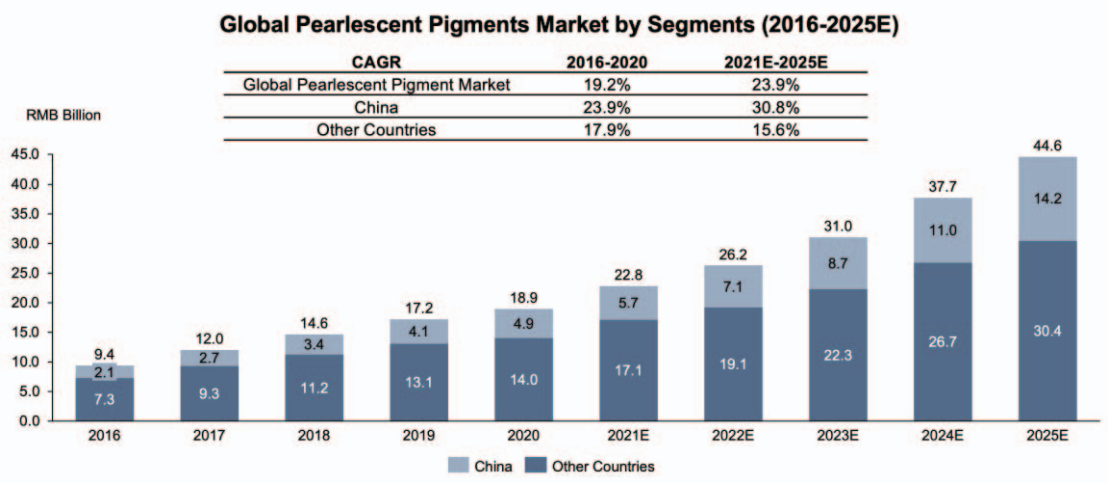
Downstream applications of pearlescent pigment products

In 2020, within the industrial pearlescent pigments market, coatings, plastics and oil ink markets reached RMB 4.6 billion, RMB 3.2 billion and RMB 2.1 billion respectively.

While the automotive pearlescent pigments market enjoys stable growth thanks to increasing penetration, volumes of production and car ownership as well as the new product development which leads to increase applications in automotive and cosmetics products. In cosmetics, due to increasing plausible income, consumption upgrade and rising awareness of appearance, the global cosmetics market has witnessed robust growth, driving along the growth of cosmetic pearlescent pigments market with a CAGR of 19.5% from 2016 to 2020.



Source: Frost & Sullivan, Organisation Internationale des Constructeurs d'Automobiles, World Paint & Coatings Industry Association, Expert Interview



Source: Frost & Sullivan, National Bureau of Statistics of China

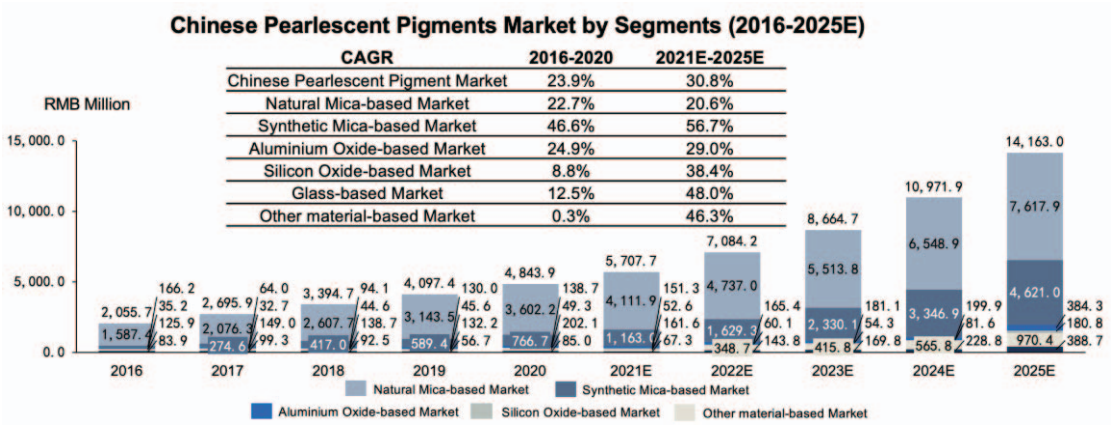
The global pearlescent pigments market showed stable growth in the last few years, reaching RMB18.9 billion in 2020 with a CAGR of 19.2% from 2016 to 2020. As one of the pivotal components of the global pearlescent pigments market, the Chinese pearlescent pigments market witnesses faster growth with the CAGR of 23.9% during 2016 and 2020, increasing from RMB 2.1 billion to RMB4.9 billion in 2020. The market share of Chinese market increased from 21.9% in 2016 to 25.6% in 2020 and is expected to reach 31.7% in 2025.

OVERVIEW OF THE PRC PEARLESCENT PIGMENT MARKET

Market size of the PRC pearlescent pigment market

Recently, the Chinese pearlescent pigment market has stably grown its market size and proportion at the global market. In 2020, the market reaches RMB 4,843.9 million by rising at a CAGR of 23.9% from 2016 to 2020, among which the natural mica-based, synthetic mica-based,

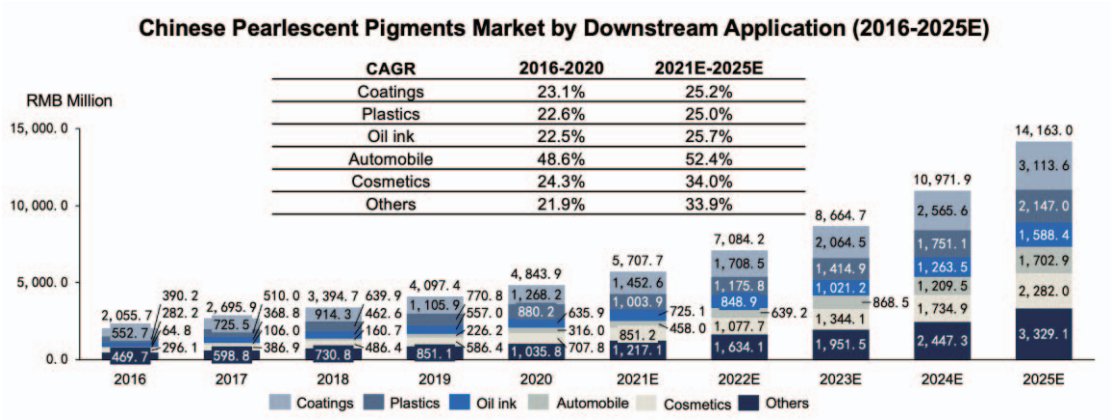
aluminium oxide-based, and silicon oxide-based pearlescent pigments markets took up a market share of 74.4%, 15.8%, 2.9% and 1.0% respectively.



Source: Frost & Sullivan, National Bureau of Statistics of China

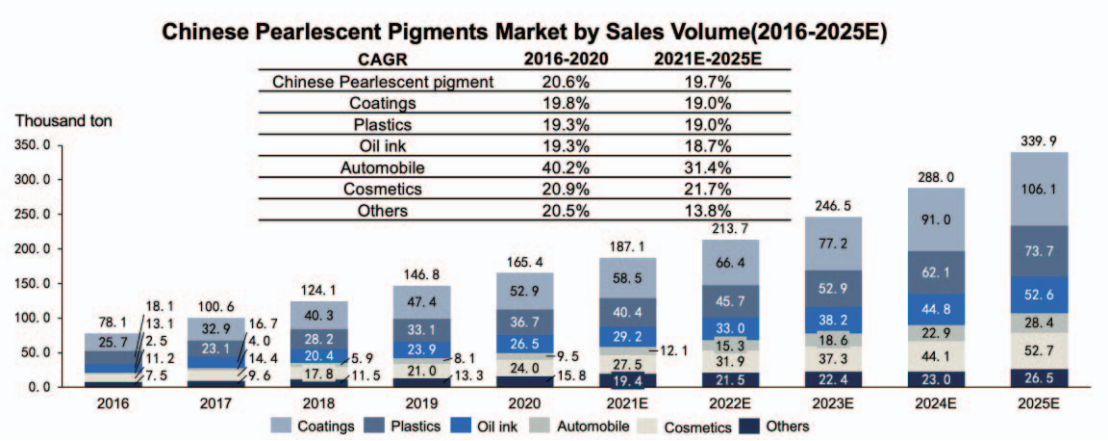
Thanks to improvement of synthetic mica technology and pearlescent pigments related production techniques, the automotive pearlescent pigments market witnesses the fastest growth among all downstream applications, growing at a CAGR of 48.6% from 2016 to 2020 and amounted to RMB316.0 million in 2020. It is predicted that with improvements of living standards, consumption upgrade, and growth of vehicles per capita, the Chinese automotive pearlescent pigments market will reach RMB1,702.9 million in 2025, with a CAGR of 52.4%.

The cosmetic pearlescent pigments market has also grown at a high speed, CAGR of 24.3% and reached RMB707.8 million in 2020. It is anticipated that with rising living standards, disposable income and awareness of appearance, the demand for cosmetics will be boosted, promoting the cosmetic pearlescent pigments market to grow at a CAGR of 34.0% from 2021 to 2025 and hit 2,282.0 million RMB in 2025.



Source: Frost & Sullivan, National Bureau of Statistics of China

The sales volume in Chinese cosmetic pearlescent pigments market grew. With its good lustre and high durability, pearlescent pigments are replacing other colourants. In addition, because colourants take only a small proportion of cosmetic production cost, the cosmetic industry is relatively insensitive to price changes, which is helpful for increasing penetration of pearlescent pigments in cosmetics. It is estimates that the sales volume in Chinese cosmetic pearlescent pigments market will reach 52.7 thousand tons in 2025.



Source: Frost & Sullivan, National Bureau of Statistics of China

Frost & Sullivan is considering the financial recession caused by the COVID-19 pandemic. Many leading business markets are suffering from operating losses. However, the pearlescent pigment market is generally less sensitive to the economic downturn mainly due to the two following reasons.

First, pearlescent pigments are used in different industries, such as cosmetic, automotive, coatings. Although these industries are generally adversely affected by the COVID-19 pandemic, the percentage of the cost of purchase of pigments only represents a very insignificant portion of the total production costs and hence, there is no direct and immediate impact on the Group by reduced usage of the pigment products.

Second, the Group is not relying on a particular industry or customers in a particular industry. The demand for the pearlescent pigment products is rapidly growing driven by post-COVID19 resumption of business and production activities.

Third, there is an increasing number of manufacturers in the PRC planning to source raw materials (including pigment products) in the PRC. This will increase the demand for pearlescent pigment products in the PRC market.

FUTURE DEVELOPMENT OF THE PEARLESCENT PIGMENT MARKET

Opportunities

— **National government policy support**: Pearlescent pigment is one of the most potential and widely applications. They are listed in the PRC's *Advanced Materials High Technology Export Catalogue (《新材料高新技術產品出口目錄》)* and enjoy export tax benefits. According to the PRC's 'The Catalogue of Industries for *Encouraged Foreign Investment (2019 Edition)' (《鼓勵外商投資產業目錄（2019年版）》)*, pearlescent pigments production (particle size of 3-150μm) is listed as an encouraged industry.

— **Extending downstream applications**: With its unique lustre and widespread colour spectrum, pearlescent pigments have broad downstream applications, from automotive topcoats to home furnishings. Meanwhile, more cosmetics manufacturers are using pearlescent pigments as colourants.

— **Breakthroughs in substrate material related technologies**: Technological breakthroughs in synthetic mica-based pearlescent pigments give producers more choices of substrate materials. Synthetic micas products work better with coating and therefore create better pearly lustre and qualities, breaking the scale constraints brought by natural micas shortage.

Market drivers of the pearlescent pigments market

Technological capabilities in production

The principles of producing pearlescent pigments are easy but difficult to implement. Technological breakthroughs can provide a strong impetus to the industry development. The global leading companies in pearlescent pigments have accumulated abundant R&D experience and a series of patents for invention, establishing their competitive advantage in the industry. Technological breakthroughs are also one of the major drivers of the rapid development of pearlescent pigments industry. For example, the globally prominent pearlescent pigment company Chesir invented self-developed synthetic mica production method, such as: a wet synthesis method for preparing $KMg_3(AlSi_3O_{10})F_2$ crystal powder, a method for preparing conductive sericite powder. With these technologies, the pearlescent material products produced by Chesir are widely used in high-end areas such as automobiles and cosmetics markets.

Extending downstream applications

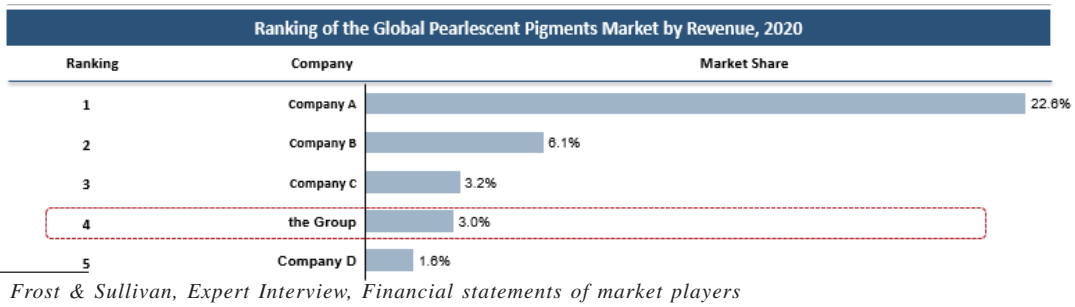
In the global market, automotive and cosmetic pearlescent pigments experienced stable growth as their penetration increases. They are likely to benefit from expanding markets of downstream applications as well as extension into more downstream applications. For instance, thanks to steady growth in volume of production and car ownership, the penetration of automotive pearlescent pigments continuously climb. Frost & Sullivan estimates that with future vehicle popularization and upgrading demand, the automotive pearlescent pigments market could further expand. Besides, with consumption upgrade and increasing awareness of appearance, the cosmetics industry could have larger market potential, leading to the rapid development of cosmetic pearlescent pigments industry.

Support of favourable policies

Supported by favourable policies from the state, the pearlescent material industry witnessed a fast growth. In the global market, according to the amendment to the Federal Regulations Act (21CFR73.350) (《聯邦規則法案》(21CFR73.350)修正案) promulgated in April 2019, the safe use of mica pearlescent pigments prepared from titanium dioxide and mica in beverages such as sweet wines has further broadened the application of pearlescent pigments, which served as strong support for upstream manufacturers to expand production capacity.

In the Chinese market, according to the Industrial Structure Adjustment Guidance Catalogue (2019 Edition) (revised in 2019) (《產業結構調整指導目錄(2019年本)》(2019年修訂)) promulgated in November 2019, pearlescent pigments belong to the nationally encouraged high-tech industry, and these industry may enjoy the corresponding encouragement policy support. Also, according to the "Classification of Strategic Emerging Industries (2018)" (National Bureau of Statistics Order No. 23) (《戰略性新興產業分類(2018)》(國家統計局令第23號)), the manufacturing of mica products with number of 3082, belongs to the new energy material manufacturing and functional filler manufacturing sectors in strategic emerging industries. Additionally, the mica-based pearlescent pigments whose number is 2643 is classified as other new functional materials, which belong to the pigments manufacturing section in the strategic emerging industries. The strategic emerging industries enjoy encouragement policy support such as tax reductions and financial benefits.

OUR RANKING IN THE GLOBAL PEARLESCENT PIGMENT MARKET

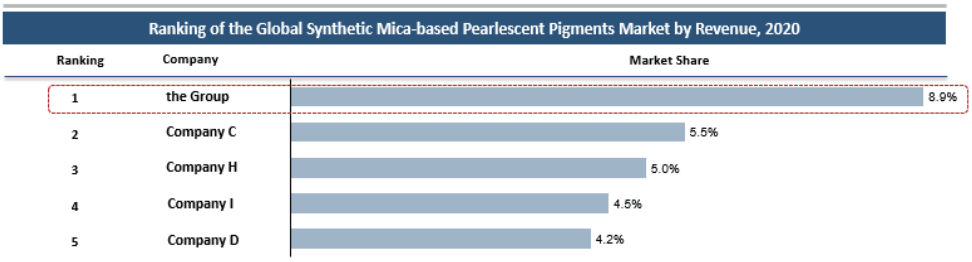


Source: Frost & Sullivan, Expert Interview, Financial statements of market players

With the presence of a few major players, the global pearlescent pigments market is moderately concentrated. The total market size by revenue of pearlescent pigments reached RMB18,942.0 million in 2020. The aggregate market share of the top five players in global pearlescent pigments market in terms of revenue from pearlescent pigments was 36.5% in 2020. Among all the players, the Group ranked the fourth with the market share of 3.0%.

Among the global pearlescent pigments providers, the role of synthetic mica-based pearlescent pigments providers is increasingly important. The synthetic mica-based pearlescent pigments have the characteristics of temperature resistance, wear resistance, light resistance, water resistance, and colour fastness. Compared with pearlescent pigments with other base, the synthetic mica-based pearlescent pigments are environmentally friendly, clean, and free of heavy metals. As a result, synthetic mica-based pearlescent pigments providers are well positioned to catch the high growth of the pearlescent pigments market.

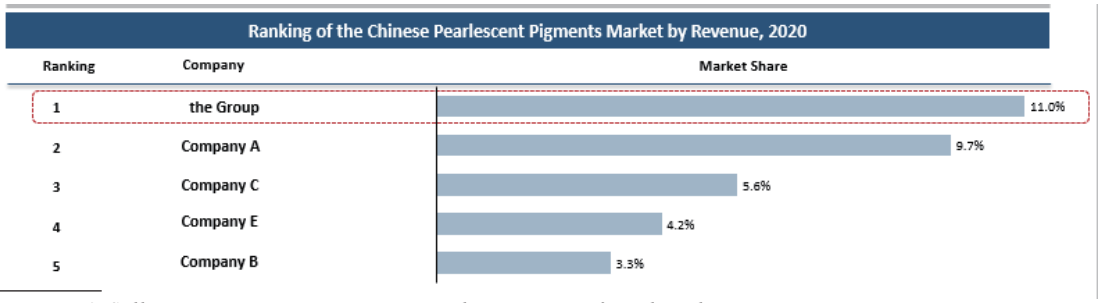
OUR RANKING IN THE GLOBAL SYNTHETIC MICA-BASED PEARLESCENT PIGMENTS MARKET



Note: The ranking is based on the sales value of synthetic mica based pearlescent pigments generated by the synthetic mica-based pearlescent pigments providers in 2020.

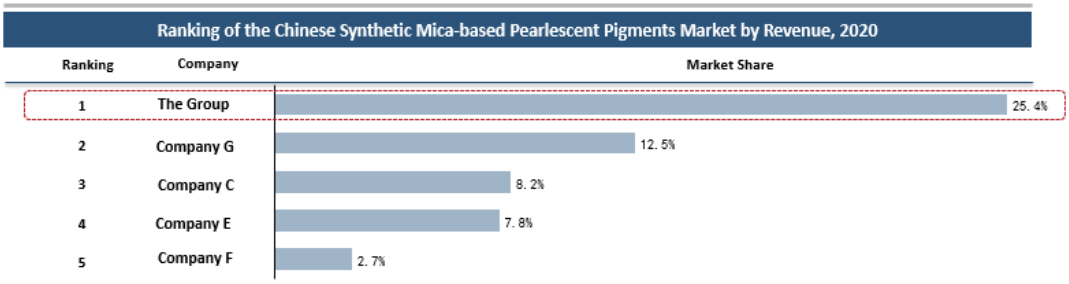
Source: Frost & Sullivan, Expert Interview, Financial statements of market players

The global pearlescent pigments market is moderately fragmented with the total market size by revenue of synthetic mica-based pearlescent pigments reached RMB2,218.2 million in 2020. The aggregate market share of the top five players in global synthetic mica-based pearlescent pigments market in terms of revenue from synthetic mica-based pearlescent pigments was 28.1% in 2020. Among all the players, the Group ranked the first with the market share of 8.9%.



Source: Frost & Sullivan, Expert Interview, Financial statements of market players

In 2020, the market size of China's pearlescent pigments (based on the revenue of pearlescent materials) reached RMB 4,843.9 billion. In terms of amount, the total market share of the top five in China's pearlescent material market accounts for 33.8% of the total market size. Among all companies, the Group ranks the first with a market share of 11.0%.



Note: The ranking is based on the sales value of synthetic mica-based pearlescent pigments generated by the Chinese pearlescent pigments providers in China in 2020.

Source: Frost & Sullivan, Expert Interview, Financial statements of market players

Company A is a listed science and technology company engaging in various businesses, including healthcare, life science and performance materials, etc.

Company B is a listed chemical company engaging in various business, including chemicals, materials, industrial solutions, surface technologies, nutrition & care and agricultural solutions.

Company C is a listed pearlescent pigment provider specializing in providing pearlescent pigments.

Company D is a listed pearlescent pigment provider professionally engaging in provisions of synthetic mica-based pearlescent pigments, natural mica-based pearlescent pigments, glass-flake pearlescent pigments, etc.

Company E is a pearlescent pigment provider specializing in providing pearlescent pigments applicable in various areas, including automobile, printing inks, coatings, etc.

Company F is a listed pearlescent pigment provider professionally engaging in pearlescent pigments.

Company G is a pearlescent pigment provider specializing in pearlescent pigments, mica, metallic pigments, etc.

Company H is a pearlescent pigment provider that provides pearlescent pigments applicable in various areas, including cosmetics, coatings, printing inks, etc.

In 2020, the market scale of China's synthetic mica base pearlescent materials (divided according to the revenue of synthetic mica base pearlescent materials) reached RMB 766.7 million. In terms of amount, the total market share of the top five synthetic mica base pearlescent materials in China accounted for 43.3% of the total market size. Among all companies, the Group ranks first with a market share of 25.4%.

Entry Barriers of Pearlescent Pigments Industry

Financial Capacity

For newcomers in the pearlescent pigment market, an amount of financial capital is needed to invest in production bases, precise equipment, raw material importation, R&D personnel and product R&D, etc. In addition, a huge amount of early investment and cash flow would be needed to support the long periods of construction and R&D. Leading companies in the industry have accumulated expertise in R&D and extensive resources. When the product is rolled out to the market, brand development, marketing and storage could also financially challenge the pearlescent pigment producers. Therefore, having a sizable financial capacity forms an entry barrier to newcomers.

Innovative Technology

The pearlescent pigment industry is a technology-intensive industry. Newcomers can produce non-patented products but may not stand out from the intense homogeneous competition, while established players possess a range of patents for their new products. Different production technologies would be required to produce pearlescent pigments catering to different downstream sectors.

Synthetic mica technology is a key technology for producers to break in the high-end market, but only a few leading producers have this technology. Solid R&D capabilities determines the competitiveness of a pearlescent pigment producer in an increasingly demanding marketspace.

Stable Client Network

As an export-oriented industry, a stable client network connecting domestic and international clients would be key for pearlescent pigment producers. However, building stable relationship with international clients or distributors requires continuous investment and improvements in products and procedure. Certification of a new pigment supplier is long and stringent. For example, it takes 5 to 8 years to become an automotive pearlescent pigment supplier.

Brand is also an important factor clients consider when choosing suppliers, while brand establishment requires long-term technological support, robust product quality and services. Downstream clients also don't frequently change suppliers when a relationship is established due to the high cost of substituting a supplier.

Raw Materials

Cheap and abundant access to raw materials has become a significant entry barrier since regulations tighten and downstream requirements rise. Natural micas are an important raw material for pearlescent pigments but there is a high dependence of Chinese producers on importation. Long-term relationship and economies of scale would give producers an essential edge in price negotiation with foreign mica suppliers.

Furthermore, while synthetic mica becomes an important raw material, the difficulty of developing synthetic micas technology poses another challenge for industry newcomers and existing small players. Therefore, industry newcomers may struggle to obtain low-cost and quality raw materials.

OVERVIEW OF THE GLOBAL MICA MARKET

Mica products may be categorised into natural micas and synthetic micas. With characteristics such as insulation, high temperature resistance, and lustre, heat insulation, micas have wide industrial applications and are thus named as industrial flavour enhancer. Their end user industries include automobile, cosmetics, electricity, pyrometallurgy and home appliances. As the research capabilities of global mica industry improve, micas' downstream applications continually expand. It is an industry norm for manufacturers of synthetic mica-based pearlescent pigment products to source synthetic mica powder externally. As the production of synthetic mica powder may require relatively higher investments in the initial stage, and the technical entry barrier of synthetic mica powder is high, thus only manufacturers with outstanding financial and technical performance may produce synthetic mica powder themselves.

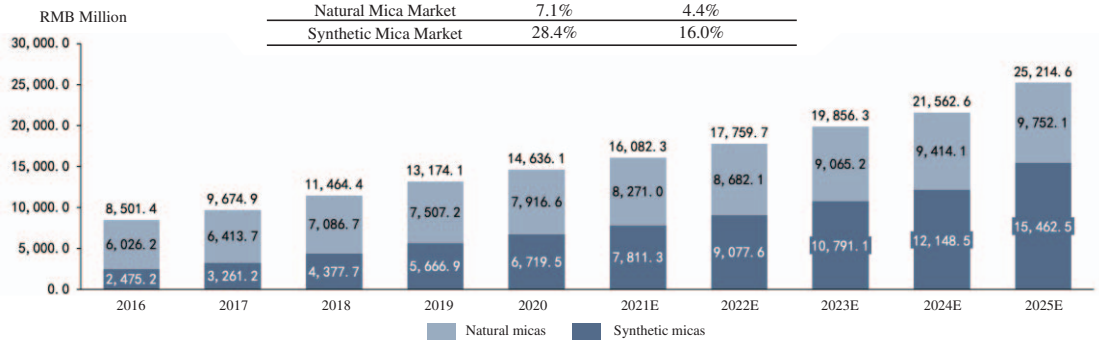
Market size of the global mica market

The global mica market has experienced a stable growth from 2016 to 2020, growing at a CAGR of 14.5% and reaching RMB 14.6 billion. Within the mica market, the demand for natural mica represented a market share of 54.1%, while synthetic mica represented a market share of 45.9%. Frost & Sullivan estimates that the global mica market will reach RMB25.2 billion in 2025 with a CAGR of 10.2%, among which synthetic mica market will grow to RMB15.5 billion and take up a market share of 61.3%. The bar chart below illustrates the development of the global mica market in terms of sales revenue by natural mica and synthetic mica for the period from 2016 to 2025 (estimated):

Compared to natural micas, synthetic mica-based pearlescent pigments make significant progress in glossiness, clarity and high temperature resistance. Besides, free of heavy metals in synthetic micas make it popular in cosmetics industry. The penetration of synthetic mica in global pearlescent pigment market is therefore expected to rise. The number of suppliers of synthetic mica powder in the global range in 2020 is around 150. Among these, the number of suppliers of synthetic mica powder who can produce themselves is around 50. Among these 50 synthetic mica powder suppliers, the number of suppliers who can produce synthetic mica powder especially for pearlescent pigments production is around 10.

Global Mica Market by Segments (2016-2025E)

CAGR	2016-2020	2021E-2025E
Global Mica Market	14.5%	10.2%
Natural Mica Market	7.1%	4.4%
Synthetic Mica Market	28.4%	16.0%



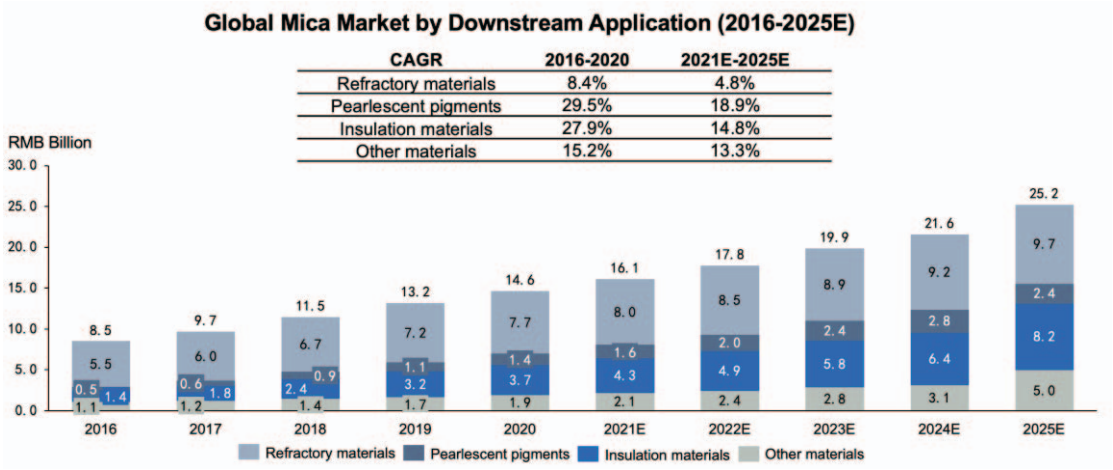
Source: Frost & Sullivan, China Non-metallic Mineral Information Platform, U.S. Geological Survey, India Bureau of Mines, OECD, Expert Interview

Applications of mica products

Pearlescent pigments, refractory materials and insulation materials are the major downstream applications of mica products and are widely used in end user industries such as automobile, cosmetics, electricity, pyrometallurgy and home appliances. In 2020, pearlescent pigments mica market reached RMB1.4 billion, refractory materials mica market reached RMB7.7 billion, and insulation materials mica market reached RMB3.7 billion. Insulation materials are also applied in the area of advanced materials such as semiconductors.

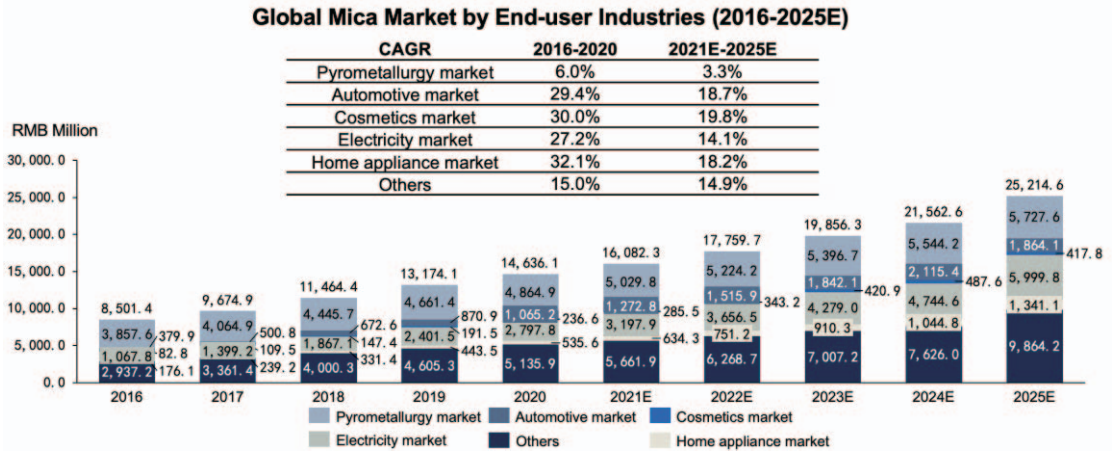
As the R&D capabilities of synthetic mica industry improve, synthetic micas will enter into more downstream applications such as thermal insulation materials and experience growth in pearlescent pigments mica market. Compared to natural micas, synthetic mica-based pearlescent pigments make significant progress in glossiness, clarity and high temperature resistance.

The diagram below illustrates the development of the global mica market in terms of the end-market applications for the period from 2016 to 2025 (estimated):



Source: Frost & Sullivan, China Non-metallic Mineral Information Platform, U.S. Geological Survey, India Bureau of Mines, OECD, Expert Interview

The diagram below illustrates the development of the global mica market in terms of the end user industries for the period from 2016 to 2025 (estimated):

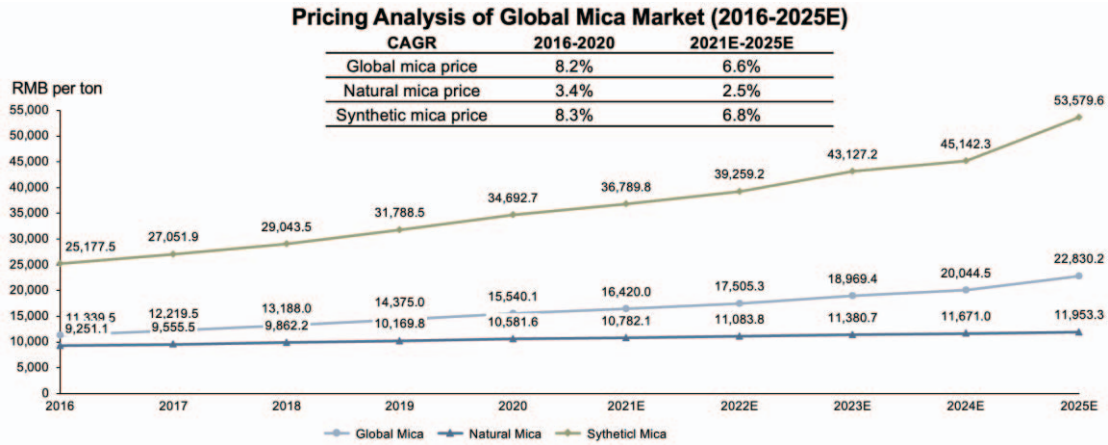


Source: Frost & Sullivan, Organisation Internationale des Constructeurs d'Automobiles, World Paint & Coatings Industry Association, Expert Interview

In 2020, the market size of pyrometallurgical mica products was RMB 4.9 billion, representing a market share of 33.2%. Because of superior insulation and high temperature resistance, mica products normally appear as insulation materials or refractory materials in pyrometallurgy market, wide applications and high industry linkage, serving an essential role in economic development and infrastructure upgrading, in the form of electrode bars in electrometallurgical furnaces or lead-out bushing. Pyrometallurgy industry is a globally important basic raw material industry with a variety of products.

Average selling prices and average cost of mica products

During the period from 2016 to 2025 (estimated), Frost & Sullivan estimates that the average selling prices of mica products would continue to increase, and the diagram below illustrates the price movements of mica products during the period from 2016 to 2025 (estimated):



Source: Frost & Sullivan, China Non-metallic Mineral Information Platform, U.S. Geological Survey, India Bureau of Mines, OECD, Expert Interview

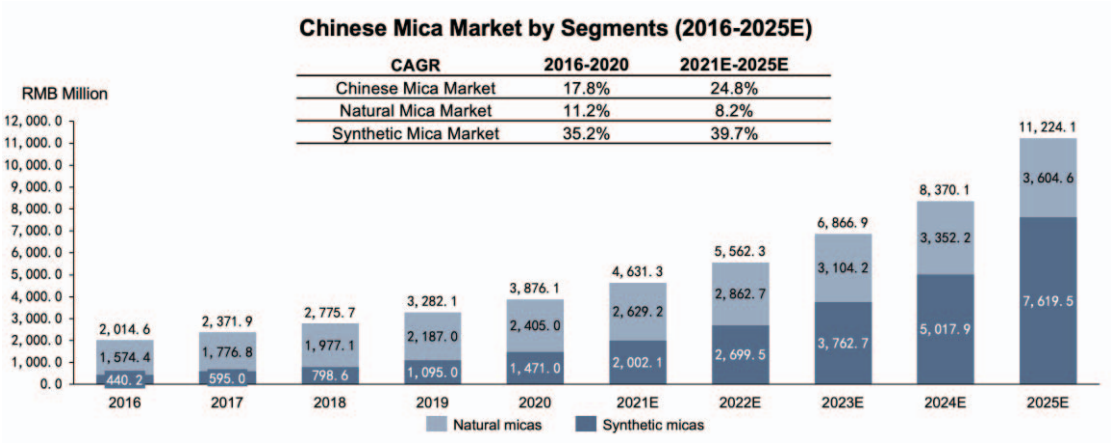
OVERVIEW OF THE PRC MICA PRODUCT MARKET

Market size of the PRC mica product market

The PRC mica market may be divided into natural mica market and synthetic mica market. With improving research and development capability of synthetic mica technology and exhausting natural mica resources, synthetic mica products are replacing natural mica products.

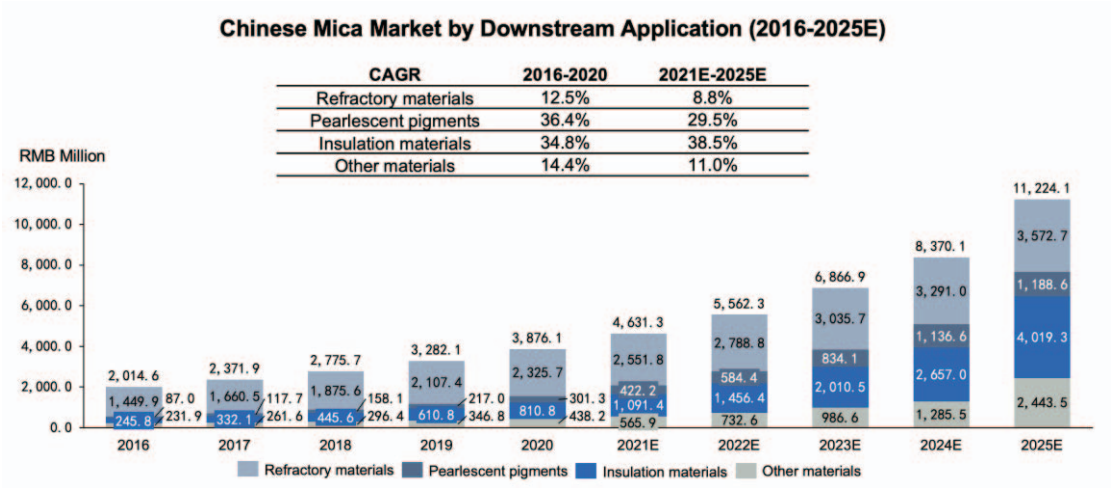
The PRC mica market recently has experienced steady development. In 2020, the market grew to RMB3.9 billion with a CAGR of 17.8% from 2016 to 2020. Within the overall market, Chinese natural mica market reached RMB2.4 billion, a market share of 62.0%. Chinese synthetic mica market RMB1.5 billion, occupying a market share of 38.0%. With the future policy support such as the Catalogue for the Guidance of Industrial Structure Adjustment (《產業結構調整指導目錄(2019年本)》), Frost & Sullivan estimates that the PRC mica market will reach RMB11.2 billion in 2025 with a CAGR of 24.8% from 2021 to 2025, within which the synthetic mica market will reach RMB7.6 billion, occupying a market share of 67.9%.

The diagram below illustrates that the percentage of natural mica and synthetic mica in terms of sales revenue generated in the PRC during the period from 2016 to 2025 (estimated):



Source: Frost & Sullivan, China Non-metallic Mineral Information Platform, Expert interview

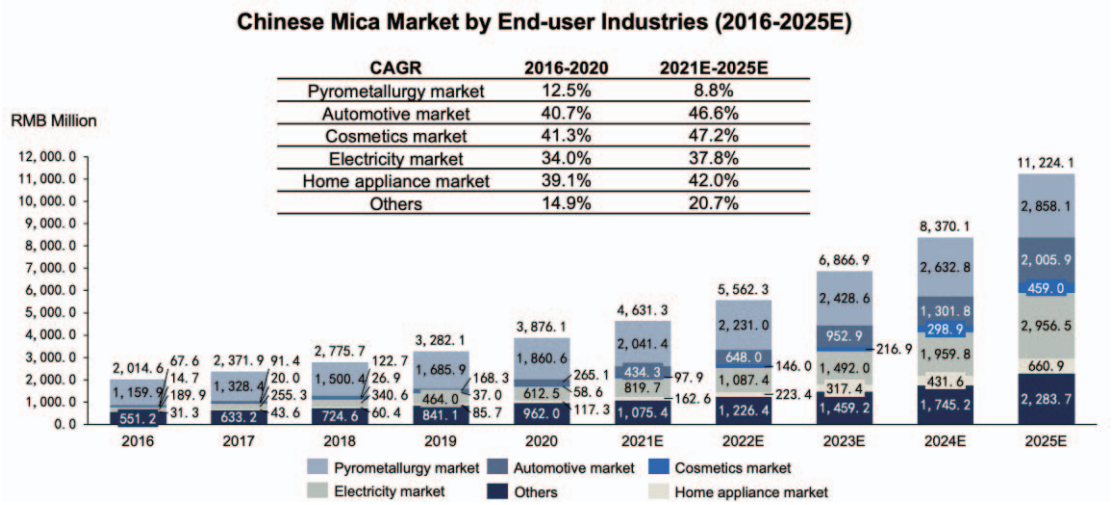
The diagram below illustrates the development of the PRC mica pigment market by downstream applications for the period from 2016 to 2025 (estimated):



Source: Frost & Sullivan, China Non-metallic Mineral Information Platform, Expert interview

In the PRC, the pearlescent pigments mica market grew at a CAGR of 36.4% from 2016 to 2020 and reached RMB301.3 million in 2020. Over the same period, the refractory materials mica market grew at a CAGR of 12.5% and reached RMB 2,325.7 million, the insulation materials mica market grew at a CAGR of 34.8% and reached RMB 810.8 million in 2020.

The diagram below illustrates the development of the PRC mica pigment market by end user industries for the period from 2016 to 2025 (estimated):



Source: Frost & Sullivan, China Non-metallic Mineral Information Platform, Expert interview

The PRC is one of the most important synthetic mica markets in the world. There is a trend of replacing natural micas with synthetic micas in end user industries, such as pyrometallurgy, automobile, cosmetics and electricity, as synthetic micas possess superior characteristics and continuously make breakthroughs in downstream applications.

FUTURE DEVELOPMENT OF THE MICA MARKET

Opportunities

— **Expanding downstream sectors bring increasing demand for micas products**: Mica downstream sectors are sectors that use mica products as raw materials, including coatings, pigments, welding electrode, rubber, plastics and new building materials. The development of those downstream sectors will bring robust demand and immense market for micas, promoting mics producers to transform from planned production to sales-based production

— **Vertical integration from downstream sectors will improve industry efficiencies**: Due to factors such as environmental protection and mine exploitation costs in the PRC, most downstream firms choose to import micas. To implement import substitution and reinforce control on supply chain, some large downstream firms extend upstream which is helpful for integrating dispersed production capabilities in mica industry and creating an effective cluster of mica exploitation, production and downstream processing.

— **Key technological breakthroughs in mica lithium extraction bring new market opportunities**: lithium is important raw material of new energy batteries. The PRC's lithium storage ranks the 4th globally but 80% of usage relies on imports, because the recovery rate is low. But with recent breakthroughs, there can likely be a mica lithium industrial chain, reducing dependence on imports

OUR COMPETITIVE ADVANTAGES

Having considered the competitive landscape of the pearlescent pigment and synthetic mica industries, our Directors consider that we have the following competitive advantages:

Strong research and development capability

Chesir Pearl has strong research and development capability, which has been the foundation for it to achieve rapid growth and become an industry leader. In the past few years, Chesir Pearl has overcome many industry bottlenecks with its strong research and development capability. Currently, the company has three synthetic mica patents of invention: a preparation method of conductive silk mica powder, wet synthesis of $KMg_3(AlSi_3O_{10})F_2$ crystal powder, a 3D-effect magnetic pearlescent pigment and its preparation method, winning gold and silver awards of Guangxi Inventions Exhibition and Trade Fair.

Resistance against financial depression

Considering the financial depression caused by the COVID-19 lockdown, many markets are suffering from business loss. However, the pearlescent pigment market is less sensitive to the economic downturn many for the two reasons. First, pearlescent pigments are widely applied to various industries such as cosmetic, automotive, coatings, etc., which may enable the pearlescent market to mitigate the risk in the economic downturn. Second, the demand for pearlescent pigments are rapidly growing driven by the resumption of work and production, considering its superiority in chemical stability, uniform dispersion in water and glycerine, and good lustre. As one of the largest pearlescent pigment producers in the PRC, Chesir Pearl has great resistance against financial depression and hence may witness a sustainable growth in the near future.

Superiority value chain

Chesir has strong bargaining power in the value chain due to its advantage in the production of raw materials, such as synthetic mica. Due to the ease to find substitute suppliers, its upstream suppliers are likely to face stiff competition for its business, providing it with strong bargaining power against its upstream raw material suppliers.

Also, the use of technology enable Chesir Pearl to remain dominant in the value chain. For example, it invented self-developed synthetic mica production method, such as: a wet synthesis method for preparing $KMg_3(AlSi_3O_{10})F_2$ crystal powder, a method for preparing conductive sericite powder. With these technologies, Chesir Pearl's pearlescent pigments are widely used in various downstream areas and have sustainable advantage in the value chain.