

## **Methylene Diphenyl Di-Isocyanate (Mdi) Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)**

Market Report | 2023-01-23 | 180 pages | Mordor Intelligence

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### **Report description:**

The methylene diphenyl di-isocyanate (MDI) market is expected to reach 7,001.66 Kilotons by the end of this year and is projected to register a CAGR of over 5% during the forecast period.

The market witnessed growth in 2021 after recovering from the COVID-19 pandemic in 2020. The consumption of MDI has increased in various end-user industries, such as construction, automotive, and others. In these end-user industries, MDI is used in various applications, including PU foam, coatings, adhesives, elastomers, and binders.

#### Key Highlights

Over the short term, the growing demand for PU in insulation in the construction industry is expected to drive the market's growth.

On the flip side, stringent regulations associated with MDI and the toxic effects of MDI may act as barriers to the growth of the market studied.

The phosgene-free MDI production process is expected to offer lucrative opportunities for the growth of the market.

Asia-Pacific dominated the market across the world, with the largest consumption from countries like China, Japan, and South Korea, and it is likely to witness the highest CAGR during the forecast period.

#### Methylene Diphenyl Di-isocyanate Market Trends

The Construction Segment is Expected to Dominate the Market

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Construction is the largest end-user industry for the MDI market, where it is used in various household, commercial, and industrial applications.

One of the largest applications is the usage of rigid PU foam as wall and roof insulation, insulated panels, and gap fillers for the space around doors and windows. Polyiso laminate board stock, used primarily in roofing and wall insulation, accounts for the majority share of total rigid PU foam in construction applications.

Some rigid PU foams can be applied to seal gaps and cover irregular shapes. Such foams include spray, pour-in-place, and one-component foams. The environmental benefits of rigid PU foam are significant and include increased energy efficiency and reduced project weight.

Protective coatings are one of the most popular applications of PUs in building and construction. They are used in the production of wood floors, basements, buildings, bridges, and many other commercial and consumer products.

PU adhesives represent another large market for PU materials in this end-user industry. Owing to their fast cure time, bond strength, and weather resistance, PU adhesives are used in roofing, flooring, wallboard, and window/door installations.

The global construction industry was valued at about USD 7.3 trillion in 2021, The value of the global construction industry declined in 2020 as construction activities were temporarily paused during the government-imposed lockdown to curb the spread of new COVID-19 cases.

Moreover, in 2021, according to the US Census Bureau, construction spending amounted to USD 1,590 billion, witnessing a growth rate of 8.2% compared to 2020, thereby increasing the consumption of MDI from various construction applications.

Therefore, all the aforementioned factors from the construction industry are likely to significantly impact the demand in the studied market in the years to come.

#### The Asia-Pacific Region is Expected to Dominate the Market

The Asia-Pacific region dominated the global market share. With the increasing demand from industries such as construction, furniture, electronic appliances, and automotive in countries like China, India, and Japan, the usage of MDI is increasing in the region.

In Asia-Pacific, China provides the major market for MDI. MDI is primarily used for polyurethane in China, and the country is the world's largest producer and consumer of polyurethane products.

According to the International Trade Administration, China is the world's biggest automobile market in terms of both production and sales. In 2021, as per the OICA correspondent's survey, the automotive production in the country reached 26.08 million, which increased by 3%, compared to 25.23 million vehicles produced in 2020.

Also, China has the largest building market in the world, making up 20% of all construction investments globally. The country alone is expected to spend nearly USD 13 trillion on buildings by 2030

According to reports by the OICA, automotive production in India witnessed a 30% growth in 2021. As per the reports by the Society of Indian Automobile Manufacturers, SIAM, the country produced 4,399,112 units of passenger cars and light vehicles in 2021.

India is home to over 2,500 decorative coatings and 800 industrial coatings manufacturers. . This increasing demand for paints and coatings has been prompting companies to increase their production capacities in the country. This is further expected to increase the demand for methylene diphenyl di-isocyanate (MDI) in the country.

Japan is one of the largest countries in the electronics industry. The production value in 2021 reached JPY 10.95 trillion (USD 80000 million). Electronics production increased to more than pre-COVID-19 levels, which is a positive sign for the market studied. Therefore, all the above-mentioned factors are likely to significantly impact the demand in the market in the Asia-Pacific region in the years to come.

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## Methylene Diphenyl Di-isocyanate Market Competitor Analysis

The methylene diphenyl di-isocyanate (MDI) market is consolidated in nature, with top players accounting for a major share of the market. Some of the key players in the market include Wanhua Chemical Co. Ltd, BASF SE, Covestro AG, Dow, and Huntsman Corporation (not in any particular order).

Additional Benefits:

The market estimate (ME) sheet in Excel format

3 months of analyst support

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