



**LUCINTEL INSIGHT  
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## **FOUR TRENDS SHAPING THE FUTURE OF THE AUTOMOTIVE ADHESIVE MARKET**

The technologies in automotive adhesive have undergone significant changes in recent years, from solvent-based adhesives to solvent free adhesives and water-based adhesives. The rising wave of methyl methacrylate adhesives, eco-friendly automotive adhesives, and water-based adhesives is creating significant potential in various passenger cars and light commercial vehicles. The major growth drivers for this market are increasing demand for lightweight

materials in vehicle manufacturing and replacement of mechanical fasteners with adhesives to make vehicles lighter and to meet higher fuel economy requirements.

The automotive adhesive market is divided into several segments, such as epoxy, polyurethane, acrylic, and others. Key players in the automotive adhesive market include Henkel, 3M, Sika, Arkema, and HB Fuller. These have been working on different strategies to drive sales using highly influential marketing approaches; however, as we examine the challenges and opportunities ahead in this market, companies can benefit from a strategy of developing eco-friendly automotive adhesives and methyl methacrylate adhesives, along with the key target market trends we have identified. Lucintel predicts the global automotive adhesive market will be valued at \$11.5 billion by 2025, with an expected CAGR of approx. 5.5% between 2020 and 2025.

Lucintel identifies four trends set to influence the global automotive adhesive market. Most of the industry players and experts agree that these four trends will accelerate developments in the automotive adhesive industry in the near future. In terms of the widespread knowledge about the automotive adhesive market already on the horizon, there is still a lack of unified perspective on the direction the industry is moving to proactively address developments. To help bring more clarity to this gap, our study aims to provide insights concerning the direction that changes are taking and how these changes will impact the automotive adhesive market.

## 1. Increasing Use of Water-Based Automotive Adhesives

Water-based adhesives are an excellent choice for automotive interior assembly application. Water-based adhesives are versatile, and they provide advanced bonding to meet the requirements of demanding applications in the automotive market. Water-based adhesives are developed using a



combination of water, polymers, and additives. They are ideal for porous and non-porous substrates. These adhesives may be formulated as solutions and are activated as the water evaporates or is absorbed by the substrate. When using a high-quality water-based adhesive, manufacturers get many of the benefits of solvent-based adhesives with a few added advantages. These include lower costs and lower VOCs. Water-based adhesives are also safer to use and better for the environment than solvent alternatives.

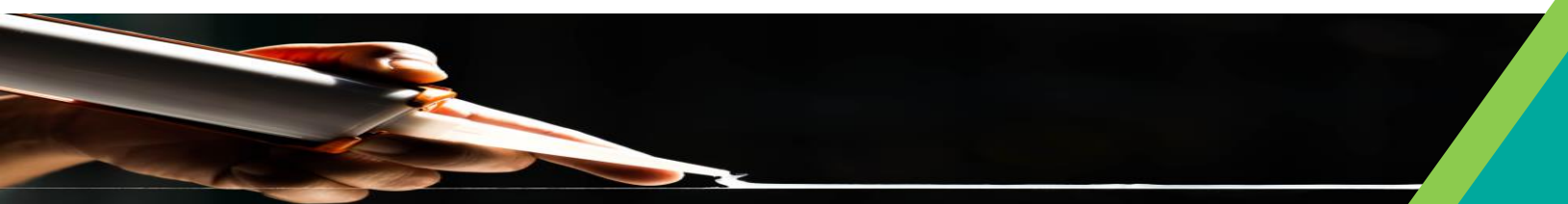
## 2. Increasing Demand for Methyl Methacrylate Adhesives (MMAs)

Methyl methacrylate adhesives have become popular for use in the automotive industry as they combine the strength of a structural adhesive with a unique cure profile that allows them to be applied over large areas and differing materials. The most attractive part of MMAs for the automotive industry is their snap-cure property; rather than building up strength slowly over the cure process like epoxies or other adhesives, MMAs remain workable and then cure to a fixture strength in a matter of minutes. That open workable time, as well as curing time, can be tailored to the exact application by changing formulations and mixing ratios. This allows time for large panels of heavy trucks or equipment to be coated with adhesive, and then strengthen to fixture as quickly as possible. Use of MMAs in this way can significantly speed up production time by allowing quicker adhering and less time waiting to cure.



## 3. Growing Demand for Eco-Friendly Automotive Adhesives

The demand for environmentally friendly automotive adhesives is increasing among OEMs in order to meet the highest possible standards of environmental regulations and safety.



Some environmentally friendly adhesives are listed below:

### **Green Automotive Adhesives**

Green adhesives mainly refer to the adhesives produced by eliminating all chemicals with the exception of organic chemicals. Companies are mainly focusing on replacing solvents with environmentally compatible solutions. Unlike mechanical fasteners, green adhesives are rust-free and they also decrease the likelihood of water and snow penetration, making a stronger and long-lasting bond for vehicles.



LOW  
VOC

### **Low VOC Automotive Adhesives**

Low VOC adhesives have been developed to prevent health issues associated with exposure to known toxic elements in conventional materials. The latest trend for eliminating volatile organic compound emissions within the interior of new vehicles has been in demand from many consumers, as they are demanding cleaner air quality. The leading companies producing automotive adhesives are mostly focusing on UV-cured and emulsion acrylic adhesives for providing both specific automotive bonding needs and low VOC performance.



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## 4. Shift from Epoxy-Based to New Silicone-Based Electrically Conductive Adhesives in Automotive Sensor Applications

Automotive electronic specialists require very rugged adhesives that can survive harsh environments. Earlier older-generation epoxy-based electrically conductive adhesives were utilized for automotive sensor applications. These epoxy-based electrically conductive adhesives had lower resistance to high temperature and had higher vibrational energy. The



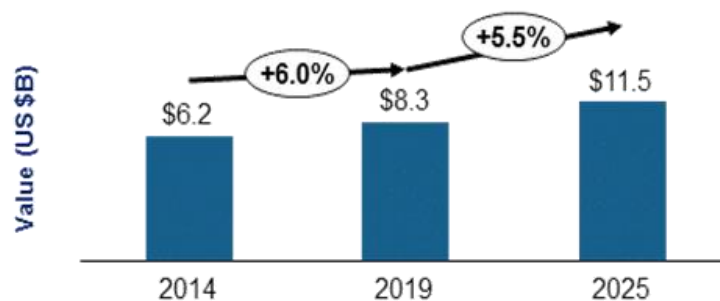
development of new silicone-based electrically conductive adhesives can withstand operating temperatures as high as 200 degrees Celsius, while also providing electrical resistance, adhesion, and flexibility. Such adhesives are required to cope with significant vibration.

## Strategic Considerations for Key Players in the Automotive Adhesive Market

The automotive adhesive industry is dynamic and ever-changing. Successful industry players are necessarily masters of innovation, change, and adaptation. To retain this status, they need to be attentive to current trends. We believe there will be promising opportunities for automotive adhesives in the passenger car and light commercial vehicle industries. As per Lucintel's latest market research report (Source: <https://www.lucintel.com/automotive-adhesive-market.aspx>), the [automotive adhesive market](#) is expected to grow with a CAGR of approx. 5.5% between 2020 and 2025, and reach \$11.5 billion by 2025. This market is primarily driven by increasing demand for lightweight materials in vehicle manufacturing and replacement of mechanical fasteners with adhesives to make vehicles lighter and to meet higher fuel economy requirements.



Trends and Forecast for the Global Automotive Adhesive Market  
(US \$B) (2014-2025)



Source: Lucintel

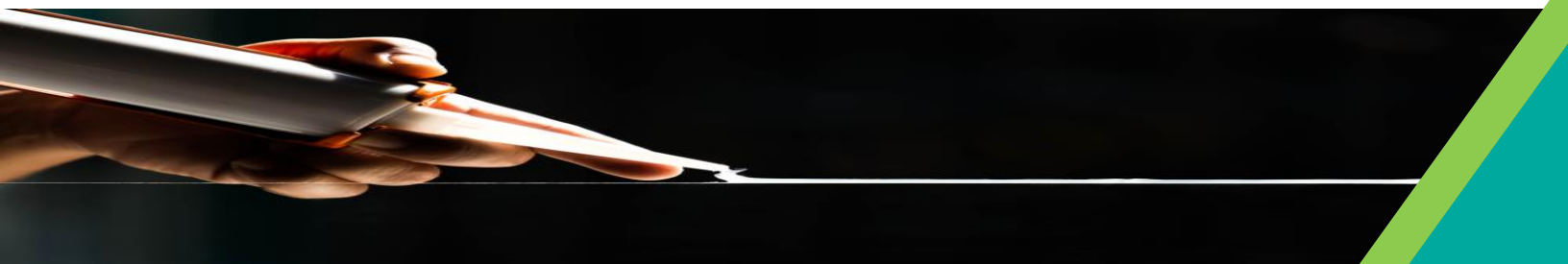
Whether you are new to the automotive adhesive market or an experienced player, it is important to understand the trends that impact the development process, as these trends as listed above will lead players to create long-term strategy formulation that will allow them to remain competitive and successful in the long run. For example, to capture growth, some of the strategic considerations for players in the automotive adhesive market are as follows:

- Automotive adhesive market players can increase their capabilities to develop water-based adhesives and MMAs.
- Players can focus on eco-friendly adhesives such as low VOC emission adhesives and green adhesives, which are expected to lead future trends.
- Investment to increase competencies in the development of high structural strength and low curing time automotive adhesives
- Research and development activities for development of low-cost automotive adhesive

**Note:** In order to gain better understanding, and learn more about the scope, benefits, and companies researched, as well as other details in the automotive adhesive market report from Lucintel, click on <https://www.lucintel.com/automotive-adhesive-market.aspx>. This comprehensive report provides you in-depth analysis on market trends and forecast, segment analysis, regional analysis, competitive benchmarking, and company profiling of key players. In addition, we also offer **strategic growth consulting** to meet your customized needs. We have



worked with many PE firms and corporate customers in the process of their market entry and M & A initiatives.



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