

Automotive Engine Encapsulation Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 80 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

The automotive engine encapsulation market was valued at USD 6.2 billion in 2021 and is expected to reach USD 8.4 billion while registering a CAGR of over 6% during the forecast period 2022-2027.

The COVID-19 pandemic resulted in negative growth for the already struggling automotive sector owing to lockdowns and shutdowns, which halted the demand for vehicles for a few months in the first half of 2020. However, the market is expected to return to normalcy as economies slowly recover.

Throughout the forecast period, the key factor driving the automotive engine encapsulation market will be stringent government pollution management regulations. The importance of automobile engine encapsulation will expand as governments worldwide establish stricter pollution standards and plan to set even higher emissions restrictions over the coming years.

Due to many benefits, such as lower CO2 emissions and less airborne noise, demand for automobile engine encapsulation is predicted to rise throughout the forecast period. Engine encapsulation was formerly only available in luxury automobiles, but this feature is increasingly being offered in lower-end vehicles as well to fulfill the rigorous noise emission standards. Engine encapsulation improves vehicle fuel efficiency by allowing the engine and oils and lubricants to reach a higher beginning temperature, which is why most manufacturers include it in their cars. Due to the lack of traditional engines in electric cars, the automotive engine encapsulation market is projected to be restrained.

Automotive Engine Encapsulation Market Trends

Stringent Government Regulations to Drive Market Growth

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

The growing requirement for thermal management in cars operating at high speeds has been a primary driver for the automotive engine encapsulation market, which is likely to continue to grow. The increased focus of automakers and governments in several countries on improving vehicle engine efficiency has led to downsizing engines and under-the-hood vehicle parts, as well as increased research and development in this field for improved part packaging efficiency and managing engine thermals, resulting in increased demand for engine encapsulation.

Because of the high demand for efficient engines in mileage-sensitive markets in many developing countries, automakers are introducing higher pressure for combustion engines, which can also help with fuel consumption reduction, necessitating the use of high-efficiency engine thermal management systems.

The US Federal Government mandated in March 2020 that between 2021 and 2026, automotive fuel consumption and emissions be reduced by 1.5% every year. According to the US Department of Energy (DOE), lowering vehicle weight by 10% results in a 6-8% boost in fuel economy. As a result, companies have started to encapsulate engines with materials such as carbon fiber and glass fiber composites.

The automotive manufacturing industry must follow certain norms in regards to environmentally friendly recycling and dismantling of vehicles, higher fuel efficiency standards, and increased use of recyclable materials in vehicles, according to European directives and standards (2000/53/EC-End Life of Vehicles) and the US Department of Transportation, which is expected to offer high potential for composites engine encapsulations.

Asia-Pacific Dominates the Automotive Encapsulation Market

Chinese automotive exports are heavily influenced by the global economy and environmental regulations. The COVID-19 pandemic has had a marginal impact on the export of vehicles from China. For the last few years, China has been the world's largest car-producing country.

For the full year 2021, auto sales grew for the first time since 2017. Auto sales rose 3.8% from a year earlier to 26.28 million units. Chinese car brands enjoy a significant cost advantage over imported cars from international automobile manufacturers in other car markets. Thus, other developing countries and emerging markets are the main export destinations for Chinese car manufacturers.

The use of carbon fiber, which is lightweight and resistant to high temperatures, is predicted to grow rapidly in the Asia-Pacific market over the forecast period. The engine encapsulation in most sports cars and high-end automobiles is constructed of carbon fiber. China is the world's third-largest producer of carbon fiber, accounting for 12% of global output.

As most mid and premium passenger vehicles in Asia-Pacific are equipped with body mounted encapsulation, the category is expected to account for a significant portion of the automotive engine encapsulation market. As the region's middle-class population grows, so will automotive sales, and Asia-Pacific is expected to be a prominent market during the forecast period.

Automotive Engine Encapsulation Market Competitor Analysis

The automotive engine encapsulation market is fragmented, with the presence of several global and domestic players. Major players in the market include Roehling Group, Autoneum Holding AG, Trocellen Automotive, BASF SE, Continental AG, and others. The main revenue generation strategy of key players is to win contracts from OEMs. OEM expansions to cater to the demand for thermal reduction are also expected to boost the demand for engine encapsulation in the country. For instance,

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

□ In June 2021, Great Wall Motors announced plans to launch the second-generation Lemon Hybrid DHT system and a dedicated hybrid engine with a thermal efficiency level of more than 45% in 2023.

Additional Benefits:

The market estimate (ME) sheet in Excel format

3 months of analyst support

Table of Contents:

1 INTRODUCTION

1.1 Study Assumptions

1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET DYNAMICS

4.1 Market Drivers

4.2 Market Restraints

4.3 Porter's Five Force Analysis

4.3.1 Threat of New Entrants

4.3.2 Bargaining Power of Buyers/Consumers

4.3.3 Bargaining Power of Suppliers

4.3.4 Threat of Substitute Products

4.3.5 Intensity of Competitive Rivalry

5 MARKET SEGMENTATION

5.1 Product Type

5.1.1 Engine Mounted

5.1.2 Body Mounted

5.2 By Fuel Type

5.2.1 Gasoline

5.2.2 Diesel

5.3 By Material Type

5.3.1 Carbon Fiber

5.3.2 Polyurethane

5.3.3 Polypropylene

5.3.4 Polyamide

5.3.5 Glasswool

5.4 Geography

5.4.1 North America

5.4.1.1 US

5.4.1.2 Canada

5.4.1.3 Rest of North America

5.4.2 Europe

5.4.2.1 Germany

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.4.2.2 UK
- 5.4.2.3 France
- 5.4.2.4 Italy
- 5.4.2.5 Rest of Europe
- 5.4.3 Asia-Pacific
 - 5.4.3.1 India
 - 5.4.3.2 China
 - 5.4.3.3 Japan
 - 5.4.3.4 South Korea
 - 5.4.3.5 Rest of Asia-Pacific
- 5.4.4 Rest of the World
 - 5.4.4.1 Latin America
 - 5.4.4.2 Middle-East

6 COMPETITIVE LANDSCAPE

- 6.1 Vendor Market Share
- 6.2 Company Profiles
 - 6.2.1 Continental AG
 - 6.2.2 Furukawa Electric Co. Ltd
 - 6.2.3 SA Automotive
 - 6.2.4 BASF SE
 - 6.2.5 3M
 - 6.2.6 Evonik Industries AG
 - 6.2.7 Compagnie de Saint-Gobain SA
 - 6.2.8 Erlingklinger AG
 - 6.2.9 Autoneum Holding AG
 - 6.2.10 Adler Pelzer
 - 6.2.11 Trocellen Automotive
 - 6.2.12 Roechling Group
 - 6.2.13 Woco Group
 - 6.2.14 Charlotte Baur Formschaumtechnik GmbH

7 MARKET OPPORTUNITIES AND FUTURE TRENDS

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Automotive Engine Encapsulation Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 80 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scott's-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scott's-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-28"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scott's-international.com

www.scott's-international.com

