
Description:

Mobile Emission Catalysts Market: Information by Precious Metal (Platinum, Palladium), Technology (Three-Way Conversion Catalysts, Diesel Oxidation Catalysts), Vehicle Type (Light-Duty Vehicles, Natural Gas Vehicles) and Region Forecast till 2023

Global Mobile Emission Catalysts Market Synopsis

The mobile emission control catalysts are the key constituents of automobiles, which are powered by internal combustion engines. These catalysts help mitigate the harmful effects of pollutants released in the exhaust, such as NOx, carbon monoxide, unburned hydrocarbons, particulate matter, diesel carbon particulates (soot), and greenhouse gases. Various advanced catalyst technologies such as three-way catalyst (TWC), diesel oxidation catalyst (DOC), selective catalytic reduction (SCR), diesel particulate filter (DPF), lean GDI catalysts, natural gas catalysts, and direct ozone reduction catalysts are gaining popularity in the automotive industry to clean the exhaust gases from both gasoline and diesel engines. Moreover, R&D is carried out for developing novel emission control technologies and enhancing the performance of the existing catalysts.

The global mobile emission catalysts market is projected to exhibit robust growth at a CAGR of 10% during the forecast period. The stringent emission regulations globally, particularly in North America and European Union (EU) are boosting the demand for mobile emission catalysts in the automotive industry. For instance, in October 2018, the regulations on emission limit standards Euro 5 and 6 for lightweight passenger and commercial vehicles have introduced new emission limits. In addition, with the rising concern regarding energy conservation and climate change, the demand for efficient internal combustion engines to reduce toxic emissions is increasing at a rapid pace, which is expected to favor the growth of the global mobile emission catalysts market in the coming years. Furthermore, the NOx and particulate emissions standards for diesel and gasoline engines are likely to boost the product demand during the review period. However, high prices of the precious metals used as catalysts and the growing popularity of the electric vehicles are likely to pose a challenge for the manufacturers operating in the global market during the assessment period.

The key players operating in the global market are adopting various business strategies such as expansion, R&D, joint ventures, new product launches, agreements, and acquisitions to strengthen their market hold. For instance, in December 2018, BASF announced investment at the new mobile emissions catalysts production facility in Shanghai, China. Innovative catalysts for gasoline and diesel vehicles will be manufactured at this plant to meet the growing demand in the Chinese market.

Global Mobile Emission Catalysts Market Share, by Precious Metal, 2017 (%)
Regional Analysis

The global mobile emission catalysts market has been studied with respect to five regions, namely Asia-Pacific, North America, Europe, Latin America, and the Middle East & Africa. Europe accounted for the largest share of the global market in 2017 and is expected to be the dominant regional market during the forecast period. This is mainly attributed to the stringent emission control regulations in Western Europe and increasing automobile production in the region. In addition, the increasing use of mobile emission catalysts in natural gas-powered vehicles coupled with the rising demand for vehicles run on compressed natural gas is also expected to propel the growth of the regional market.

The market in Asia-Pacific is projected to register the highest CAGR during the review period owing to strict emission control regulations in China, Japan, and India. Furthermore, there have been significant investments by BASF, the leader in emission catalysts market, in the region.

Market Segmentation

The global mobile emission catalysts market has been segmented on the basis of precious metal, technology, vehicle type, and region.

By precious metal, the global mobile emission catalysts market has been classified into platinum, palladium, rhodium, and others.

Based on technology, the global mobile emission catalysts market has been categorized as three-way conversion catalysts, selective catalytic reduction, diesel oxidation catalysts, lean GDI catalysts, direct ozone reductions catalysts, diesel particulate filter, natural gas catalysts, and others.

On the basis of vehicle type, the global mobile emission catalysts market has been divided into light-duty vehicles, heavy-duty diesel vehicles, natural gas vehicles, motorcycles & utility engines, and others.

The global mobile emission catalysts market has been segmented into five key regions—Asia-Pacific, North America, Europe, Latin America, and the Middle East & Africa.

Key Players

Some of the leading players in the global mobile emission catalysts market are BASF SE (Germany), Solvay (Belgium), Johnson Matthey (UK), Clariant (Switzerland), Umicore AG & Co. KG (Belgium), Cataler Corporation (Japan), Corning Incorporated (US), Heraeus Holding (Germany), N.E. CHEMCAT (Japan), Zeolyst International, Inc (US), and others.

Intended Audience

- Mobile Emission Catalysts Manufacturers
- Traders and Distributors of Mobile Emission Catalysts
- Research and Development Institutes
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