

Diesel Exhaust Fluid Market: Technological Innovations and Advancements

The global diesel exhaust fluid market is projected to witness steady growth on account of stringent emission norms for commercial vehicles. Diesel exhaust fluid or AUS 32 is a urea-based consumable injected into diesel vehicle exhaust streams to reduce emissions of nitrogen oxides. Consisting of around 67.5% deionized water and 32.5% urea, diesel exhaust fluid helps break down nitrogen oxides into nitrogen, water, and small amounts of carbon dioxide and nitrous oxide through catalytic reduction systems. The Global Diesel Exhaust Fluid Market is estimated to be valued at US\$ 11.60 Mn in 2024 and is expected to exhibit a CAGR of 7.6% over the forecast period 2023 to 2030.

Key Takeaways

Key players operating in the [diesel exhaust fluid market](#) are Yara International, BASF SE, CF Industries Holdings Inc., Agrium Inc., Cummins Inc., Shell ROTELLA (Royal Dutch Shell Inc.), Mitsui Chemicals Inc. and KOST USA. Stringent emission standards for commercial vehicles like trucks and buses in regions like Europe and North America have boosted the sales of diesel particulate filters and selective catalytic reduction systems, driving the need for diesel exhaust fluid. Many countries are also implementing similar standards, which is expected to increase the global demand for diesel exhaust fluid during the forecast period. With growing freight transportation across borders, key players are expanding their presence in emerging economies like China, India and Brazil to tap the increasing requirement for diesel exhaust fluid in commercial vehicles.

Market Key Trends



One of the key trends in the diesel exhaust fluid market is the development of infrastructure for diesel exhaust fluid refilling. Since consistent refilling of the fluid is necessary to meet emission norms, companies are focusing on setting up more diesel exhaust fluid filling stations along major highway routes. This is making diesel exhaust fluid easily available and driving compliance with emission regulations. Cummins, the diesel engine manufacturer, has partnered with retail petroleum companies in regions like the US and Canada to develop diesel exhaust fluid refilling infrastructure near petrol pumps and truck stops. Such initiatives are boosting the sales of diesel exhaust fluid.

Porter's Analysis

Threat of new entrants: The [diesel exhaust fluid market](#) requires large capital investments in production facilities, distribution channels due to its dependence on urea production. **Bargaining power of buyers:** Large fleet operators have more bargaining power due to their buying volumes but they cannot switch to substitutes easily. **Bargaining power of suppliers:** Suppliers have moderate bargaining power as urea production capacity is concentrated among few players but supply contracts balance their power. **Threat of new substitutes:** There are currently no cost-effective chemical or technical substitutes for diesel exhaust fluid used in SCR systems. **Competitive rivalry:** Competition is based on product quality, reliability of supply and price.

Geographically, North America is currently the largest market for diesel exhaust fluid, constituting over 35% of global market value. This is attributed to the region's large vehicular fleet that runs on diesel and mandatory implementation of emission regulations. The Asia Pacific region is poised to be the fastest growing market during the forecast period due to rising vehicle sales, infrastructure development and tightening of emission norms across major countries like China and India.

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