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# Diesel Exhaust Fluid (AdBlue) Market Research Report—Global Forecast till 2030

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## Description:

### Global Diesel Exhaust Fluid Market Overview

Diesel Exhaust Fluid Market Size was valued at USD 18649.5 million in 2021. The diesel exhaust fluid industry is projected to grow from USD 20216.06 million in 2022 to USD 35555.06 million by 2030, exhibiting a compound annual growth rate (CAGR) of 8.40% during the forecast period (2024 - 2030). Rising regulatory norms being adopted to manage vehicle emissions and rising adoption of diesel exhaust fluid technology are the key market drivers enhancing the diesel exhaust fluid market growth.

Diesel Exhaust Fluid Market Overview

Source: Secondary Research, Primary Research, MRFR Database and Analyst Review

### Diesel Exhaust Fluid Market Trends

- **Growing average age of vehicles to boost market growth**

The demand for diesel exhaust fluid aftermarket products is impacted by several variables, including the increasing average age of cars, bettering infrastructure, an increase in the number of vehicles on the road, average miles traveled, diesel exhaust fluid replacement cycles, and growing maintenance issues. The average age of a car in North America increased from 10.1 to 11.8 years between 2005 and 2019. This is because of technological advancements, safer road infrastructure, and safety measures. The number of automobiles on the road is increasing due to the rising average age of vehicles. Furthermore, implementing strict emission rules by several nations is anticipated to increase demand for SCR on a scale. For instance, NOx limitations have dramatically decreased due to Euro VI requirements. SCR is being used as an after-treatment technology by OEMs and Tier-1 suppliers. All of these variables influence the demand for diesel exhaust fluid in the aftermarket.

**Figure 1: Average age by vehicle type**

### Average age by vehicle type

Source: Secondary Research, Primary Research, MRFR Database and Analyst Review

Additionally, according to S&P Mobility, as the fleet's fleet number of passenger cars and light trucks increased to 283M in 2022, the average age of light vehicles in US rose to a record high. This year, light vehicles in use (VIO) in the US had an average age of 12.2 years, roughly two months from the previous year. Therefore, such a surge in the average life of vehicles has enhanced the diesel exhaust fluid market CAGR across the globe in recent years.

Furthermore, over the past few years, the US market for battery electric cars (BEVs) has grown quickly, with new registrations rising despite the pandemic. The average age of electric vehicles in US is 3.8 years old this year, down from 3.9 years last year. Since 2016, this age range has been constant at 3 to 4.1 years. Thus, such an increase in demand for BEV is another factor driving the growth of the diesel exhaust fluid market revenue.

### Diesel Exhaust Fluid Market Segment Insights

#### Diesel Exhaust Fluid Technology Insights

The diesel exhaust fluid market segmentation based on technology, includes selective catalytic reduction (SCR), lean NOx trap (LNT), exhaust gas recirculation (EGR), diesel oxidation catalyst,

and others. The selective catalytic reduction (SCR) segment held the majority share in 2021, contributing to the diesel exhaust fluid market revenue. This is primarily because of its simple design and improved combustion efficiency. The SCR system delivers more power while using less gasoline. For instance, NOx limitations are predicted to decrease drastically under Euro VI norms. As a result, OEMs are using SCR as an after-treatment technology more frequently.

Lean NOx Trap (LNT) is the second fastest-growing segment, which accounts for a considerable share of the diesel exhaust fluid market share is Lean NOx Trap (LNT). Lean NOx Trap (LNT) is a device used in diesel engines' after treatment systems to reduce NOx. Because LNT employs diesel fuel as a reducing agent and does not require the installation of a reducing agent tank within the vehicle, LNT can absorb and reduce NOx emissions across a wide range of exhaust temperatures, from 150°C to 400°C.

**February 2022:** The German Association of the Automotive Industry VDA granted CrossChem International's Hong Kong subsidiary accreditation, enabling it to begin producing AdBlue DIESEL EXHAUST FLUID and verifying that the final product fulfils the highest standards. This approval will allow the company to expand in the diesel exhaust fluid industry.

**January 2020:** In order to bulk dispense IndianOil's DEF (diesel exhaust fluid), also known as IOC ClearBlue, in Cummins Technologies India Pvt Limited's advanced engines with SCR (Selective Catalytic Reduction) systems, the two parties have inked a contract. The contract was signed in Mumbai by Ms. Anjali Pandey, Vice President (Engine Business Unit and Component Business), Cummins India, and Mr. Subimal Mondal, Executive Director (Lubes), IndianOil.

**Figure 2: Diesel Exhaust Fluid Market, by Technology, 2021 & 2030 (USD Million)**  
**Diesel Exhaust Fluid Market, by Technology, 2021 & 2030**

**Source: Secondary Research, Primary Research, MRFR Database and Analyst Review**

**Diesel Exhaust Fluid Regional Insights**

By Region, the study provides the market insights into North America, Europe, Asia-Pacific and Rest of the World. Asia Pacific diesel exhaust fluid market accounted for USD 8541.47 million in 2021 and is expected to exhibit a 45.80% CAGR growth during the study period. This is attributed to the growing demands from across end use industries for diesel exhaust fluid and rising concerns regarding vehicle emissions across the region.

Further, the major countries studied in the market report are: The U.S, Canada, Germany, France, UK, Italy, Spain, China, Japan, India, Australia, South Korea, and Brazil.

**Figure 3: DIESEL EXHAUST FLUID MARKET SHARE BY REGION 2021 (%)**  
**DIESEL EXHAUST FLUID MARKET SHARE BY REGION**

**Source: Secondary Research, Primary Research, MRFR Database and Analyst Review**

North America diesel exhaust fluid market accounts for the second-largest market share. Sustainable growth and environmental protection are now a priority for North American economies, which are among the most developed in the world. North American countries have seen an increase in demand for heavy- and medium-duty vehicles due to their extensive industrial bases and the requirement to make it easier to convey manufactured goods to consumers. Further, the Canada diesel exhaust fluid market held the largest market share as Canada has some of the tightest emission regulations on the planet. As a result, the country's usage of diesel exhaust fluid has increased due to the desire to reduce vehicular pollution, especially that from heavy-duty vehicles. Additionally, the US diesel exhaust fluid market was the fastest growing market in the North American region.

The Europe diesel exhaust fluid market is expected to grow at the fastest CAGR from 2022 to 2030. This is due to Euro6 emission regulations which mandate that most brand-new diesel cars must be equipped with AdBlue/diesel exhaust fluid technology. Moreover, Germany diesel exhaust fluid market held the largest market share, and the Australia diesel exhaust fluid market was the fastest growing market in the Asia-Pacific region

For instance, Australia diesel exhaust fluid market is driven by rising governmental investments. The Australian government intends to enhance diesel exhaust fluid production capacity and invest A\$49.5 million (\$33.38 million) in diesel exhaust fluid reserves to ensure supply to the domestic trucking industry. This has happened following shortage threats for the fluid throughout the previous 12 months. The minister stated that a grants program would be launched to support projects in manufacturing that would lead to the local production of TGU. More industry-provided voluntary data will be acquired to inform the market about domestic TGU and diesel exhaust fluid stockpiles.

**Diesel Exhaust Fluid Key Market Players & Competitive Insights**

Major market players are spending a lot of capitals on R&D to enhance their product lines, which will aid the diesel exhaust fluid market expand. Market players are also taking a range of strategic measures to expand their worldwide footprint, with prime market developments such as new product innovations & launches, contracts & agreements, mergers and acquisitions, better investments, and collaboration & strategic partnerships with other organizations in the diesel exhaust fluid market. Competitors in the diesel exhaust fluid industry must offer cost-effective items to extend and survive in an increasingly high competitive and expanding market environment.

One of the primary business strategies adopted by manufacturers in the diesel exhaust fluid industry to benefit clients and expand the market sector is to manufacture locally to reduce operating costs. In recent years, the diesel exhaust fluid industry has provided medicine with some of the most significant benefits. The diesel exhaust fluid market major player such as BASF SE (Germany), BP p.l.c (UK), Yara (Norway), and others are working to drive market growth via investing heavily in research and development activities.

BP p.l.c (UK) is an international integrated energy business company with a presence across most regions. The company seeks to offer integrated energy and mobility solutions to assist cities and industries in reducing carbon emissions while generating interesting economic prospects. In June 2022, a massive project slated for Australia that would cover 6,500 square kilometers was approved, with BP agreeing to acquire a 40.5% ownership in the Asian Renewable Energy Hub.

Also, BASF SE (Germany) is a chemical company. It is involved in the manufacturing, promotion, and retail sales of chemicals, polymers, crop protection products, and performance goods. In terms of products, it offers solvents, adhesives, surfactants, fuel additives, electronic chemicals, pigments, paints, food additives, fungicides, and herbicides. For instance, in August 2021, The Verbund site, run by BASF YPC Co., Ltd., a 50/50 joint venture between BASF and SINOPEC in Nanjing, China, will be further expanded. It comprises the development of various downstream chemical facilities' production capacities and the construction of a new tert-butyl acrylate factory to serve the expanding Chinese market. With this growth, SINOPEC will be able to distribute diesel exhaust fluid products more widely.

#### **Key Companies in the diesel exhaust fluid market includes**

- BASF SE (Germany)
- Yara (Norway)
- Mitsui Chemicals Inc (Japan)
- BP p.l.c (UK)
- co.za (Republic of South Africa)
- Engen Petroleum Ltd (South Africa)
- Borealis AG (Austria)
- Nissan Chemical Corporation (Japan)
- GreenChem (Netherlands)
- NOVAX Material & Technology Inc (China)
- Royal Dutch Shell PLC (The Netherlands)
- Adeco doo (Siberia), among others

#### **Diesel Exhaust Fluid Industry Developments**

**January 2022:** The acquisition of BP's retail network, wholesale fuel business, and logistical assets by TotalEnergies will help the company grow in Mozambique. The deal includes a network of 26 gas stations, a client list of businesses, and 50% of SAMCOL, the logistics firm that formerly belonged to TotalEnergies and BP and manages the Matola, Beira, and Nacala gasoline import terminals. This growth will support the company's diesel exhaust fluid product sales.

**November 2022:** OMV Petrom started the local production of AdBlue, following an investment of approximately EUR 800,000

AdBlue usage reduces nitrogen oxide emissions from diesel engines by up to 90%. OMV Petrom, the largest integrated energy company in South-Eastern Europe, has begun production of AdBlue, an essential product for reducing emissions of diesel engines. In the first phase, AdBlue will be sold in OMV and Petrom filling stations and starting next year it will be also sold in other networks.

The company thus meets the growing demand for this product, amid the increase in the number of commercial vehicles in Romania.

Radu Căprău, Member of the Directorate responsible for Refining & Marketing: "The start of AdBlue production was a priority for us as we expect the demand for this product to increase. We expect the demand for AdBlue in the Romanian market will increase by over 30% by 2027 compared to this year, to a level of about 130 million liters."

AdBlue is a standard product used for modern diesel engines. It is composed of about 1/3 urea and 2/3 demineralized water. The new production capacity is located in the south of Bucharest, and the

investments necessary for the project amounted to approximately EUR 800.000.

**December 2021:** Brisbane chemical manufacturer Incitec Pivot Limited has announced an agreement with the Australian Government to ramp up urea production and shore-up the country's dwindling stockpile of diesel vehicle additive AdBlue.

Energy Minister Angus Taylor announced today the loftily named AdBlue Taskforce had reached agreement with the company to boost its local production and storage of Technical Grade Granular Urea (TGU), an ingredient in the additive that reduces nitrous oxide particles.

The taskforce is interestingly enough led by Chair of Manufacturing Australia and former Incitec Pivot CEO James Fazzino, along with former Chairman and CEO of The Dow Chemical Company Andrew Liveris, and Australia's Chief Scientist Dr Cathy Foley.

Incitec Pivot will now be in a position to supply quantities needed by current suppliers, Minister Taylor's office said, adding it would by extension make the local supply chain more resilient, and give the logistics industry some desperately needed supply certainty.

### **Diesel Exhaust Fluid Market Segmentation**

#### **Diesel Exhaust Fluid Technology Outlook**

- Selective Catalytic Reduction (SCR)
- Lean NOx Trap (LNT)
- Exhaust Gas Recirculation (EGR)
- Diesel Oxidation Catalyst
- Others

#### **Diesel Exhaust Fluid Regional Outlook**

- North America
  - US
  - Canada
- Europe
  - Germany
  - France
  - UK
  - Italy
  - Spain
  - Rest of Europe
- Asia-Pacific
  - China
  - Japan
  - India
  - Australia
  - South Korea
  - Australia
  - Rest of Asia-Pacific
- Rest of the World
  - Middle East

- Africa
- Latin America

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