

Electric Vehicles Fluids: Market Analysis and Opportunities (Commercial Volume)

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2nd edition

Accelerating decarbonization efforts in the commercial vehicle (CV) sector are promoting the deployment of low- and zero-emission technologies. Electrification remains a viable option for CV applications. Electrification of CVs will drive technological innovation, as performance requirements for the various fluids consumed in electric CVs are different from those used in conventional internal combustion engine (ICE) vehicles. Electric vehicles (EVs) will herald a new lubricants market niche focused on the lubrication needs of EVs specifically used in commercial applications.

Regional Coverage:

- China
- Europe
- United States
- Japan

SCOPE

- › Assessment of the current and projected electric CV fleet in terms of overall size, technologies used, and key OEMs
- › Electric CV maintenance and fluid change practices and the resulting demand for electric CV fluids (including fuel-cell vehicles)
- › Analysis of fluid requirements for different EV technologies
- › Analysis of evolving dependencies among various stakeholders in the electric CV supply chain
- › Assessment of the impact of various EV technologies, such as e-drivelines and e-axles on EV fluid specifications and demand
- › Identification of market opportunities and challenges

FEATURES OFF-HIGHWAY VEHICLES

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Introduction

Executive Summary

An overview of the report findings including a succinct view of the global EV fluids market

Country Profiles

- Detailed profiles of four markets (listed in Table 1), including the following information:

Enablers For the EV Transition

Description of current electric CV fleet by:

- Major segment: on-highway and off-highway (mining)
- Electric powertrain type: BEV, FCV, HEV/MHEV, and PHEV
- EV charging infrastructure
- Regulations and other decarbonization efforts promoting EV deployment

Trends in Electric CV Powertrain Technologies

Description of current and emerging EV architectures and trends in electric CVs

- Analysis of battery technology trends: optimization, energy density, and new materials
- Description of electric powertrain technologies and future technological development
- Technology focus of leading EV OEMs, introduction of new models, and their relationship with lubricants suppliers and tier 1 suppliers

EV Fluids Market Analysis

Profiles of engine oils, transmission fluids, coolants, and grease markets, covering the topics listed below:

- Current and future OEM specifications
- Maintenance practices and drain intervals
- Overall demand and splits by factory fill versus service fill

Market Appraisal

- Impact of technological evolution on EV fluids demand
- Implications for lubricants industry participants
- Market opportunities and challenges
- Long-term outlook (2050)

TABLE 1. LIST OF COUNTRIES/REGIONS

China

Europe (European Union countries + UK)

The United States

Japan



REPORT BENEFITS

This report assists lubricants industry participants in identifying opportunities and challenges within the EV fluids market for CVs. It will also serve as an invaluable tool in the strategic planning process. Specifically, the report helps subscribers:

Develop an understanding of the emerging EV technologies that are reshaping the CV fluids market

Assess current and future demand for various EV fluids in CV fleets based on maintenance and fluid change practices

Understand the emerging performance requirements for electric CV fluids; design and develop products meeting these requirements

METHODOLOGY

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Brazil

+55-11-3624-8718

China

+86-21 6012-6500

Abu Dhabi

+971 02 654 4147

Europe

+32-2-770-4740

India

+91-124-4546-100

Japan

+81-3-3242-6277