

# Electric Vehicles Fluids: Market Analysis and Opportunities (Consumer Volume)

**Base Year: 2020**

**Published:  
Q3 2021  
2<sup>nd</sup> edition**

Performance requirements for the various fluids consumed in electric vehicles (EVs) are significantly different from those used in conventional Internal Combustion Engine (ICE) vehicles. Besides being different from ICE vehicle fluids, the performance requirements of EV fluids may differ based on the technology used to implement electric drives. The growth of EVs will herald a new lubricants market niche focused on the lubrication needs of EVs.

**Regional Coverage:**

- China
- Europe
- Japan
- United States

## SCOPE

- › Assessment of the current and projected EV fleet in terms of overall size, technologies used, and key OEMs
- › Analysis of fluid requirements for different EV technologies
- › Assessment of the impact of various EV technologies on EV fluid specification and demand
- › EV maintenance and fluid change practices and the resulting demand for EV fluids
- › Evaluation of fluid requirements of installed and announced fast-charging infrastructure projects
- › Identification of market opportunities and challenges

**FEATURING COOLING  
OF FAST-CHARGING SYSTEMS**

# TABLE OF CONTENTS

## Introduction

## Executive Summary

An overview of the report findings

## Country Profiles

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

## Electric Passenger Vehicle Fleet Size and Growth

- Description of current overall electric vehicle fleet (BEV, HEV and PHEV) and growth
- BEV, HEV and PHEV fleet size, sales, production by OEM, and growth
- Factors influencing electric vehicles sales
- 2040 outlook

## Trends in Electric Passenger Vehicle Powertrain Technologies

Description of current and emerging EV architectures and trends in HEV, PHEVs, and BEVs

- Analysis of battery technology trends: optimization, energy density, new materials
- Description of thermal management systems including battery, e-motors, charging points
- Description of charging infrastructure development including fast technologies
- Technology focus of leading EV OEMs, introduction of new models, and their relationship with lubricants suppliers

## Electric Vehicles Fluids Market Analysis

Engines oils, transmission fluids, coolants/heat transfer fluids, and grease markets are profiled, covering the topics listed below:

- Typical/key OEM specifications
- Maintenance practices and drain intervals
- Overall demand and splits by factory fill versus service fill and by EV technology
- Pricing points in comparison to ICE products
- 2040 outlook

## Market Appraisal

- Impact of technological evolution in electric vehicle fluids demand
- Implications for lubricants industry participants
- Market opportunities and challenges

**TABLE 1. LIST OF COUNTRIES/REGIONS**

China
Europe (France, Germany, United Kingdom)
Japan
The United States

# REPORT BENEFITS

This report assists lubricants industry participants in identifying opportunities and challenges within the EV fluids market. 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 automotive fluids market

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

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

# METHODOLOGY

Kline's approach places principal emphasis on primary research techniques to ensure that the foundation of business intelligence and insight is accurate, current, and reliable. Building on our 60-plus years in the business and leveraging our worldwide network of offices, our teams of seasoned professionals draw upon pragmatic industrial and commercial experience to understand and interpret global impacts and local perspectives.

## A Full Spectrum of Services



Custom  
Research



Market Research  
Reports



Management  
Consulting

# KLING CREDENTIALS

Kline is a leading global management consulting and market research firm offering the complete spectrum of services. The firm has served the management consulting and market research needs of organizations in the chemicals, materials, energy, life sciences, and consumer products industries for over 60 years.

### Americas

+1-973-435-3407

### Brazil

+55-11-3079-0792

### China

+86-21 6012-6500

### Dubai

+971-4-214-9892

### Europe

+32-2-770-4740

### India

+91-124-4546-100

### Japan

+81-3-3242-6277