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Product Data Sheet (PDS)



GP EV Gear Oils

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GP EV Gear Oils are high-performance, synthetic gear oils developed for use in the **gearboxes** and **drivetrains** of **electric vehicles (EVs)** and **hybrid electric vehicles (HEVs)**. These oils are formulated to meet the demanding requirements of modern electric vehicles, ensuring smooth operation, efficient energy transfer, and extended lifespan of drivetrain components.

Key Features and Benefits:

Excellent Gear Protection:

GP EV Gear Oils are designed to offer superior protection against **wear**, **corrosion**, and **oxidation** in EV gearboxes. This helps maintain the smooth operation of gears, bearings, and other critical components under both normal and demanding conditions.

Enhanced Efficiency:

The low friction properties of **GP EV Gear Oils** help minimize energy losses within the drivetrain, thereby improving overall vehicle **efficiency** and contributing to better **energy conversion** and **battery performance**.

Thermal Stability and Performance:

These oils are engineered to handle the high and fluctuating temperatures in **electric drivetrains**. They maintain their performance and viscosity over a wide temperature range, ensuring that the electric motor and transmission components remain at optimal operating temperatures, even under heavy loads.

Improved Longevity:

GP EV Gear Oils have extended **service life** and offer **protection** against the effects of high stress, extending the lifespan of vital drivetrain components. The oils help reduce the need for frequent maintenance and improve overall durability, particularly in electric vehicles that may operate under constant power demands.

Energy Conservation:

Designed with **low-viscosity formulations**, GP EV Gear Oils ensure that there is minimal drag within the system. This reduces power losses in the drivetrain, resulting in an increase in **vehicle range** and improved **efficiency**.

Environmental Benefits:

Being fully synthetic, GP EV Gear Oils are designed with **environmental considerations** in mind. They offer long-term durability, reducing the frequency of fluid changes, which in turn helps reduce waste and contributes to more **sustainable mobility**.

Corrosion and Rust Protection:

The oils provide an excellent protective layer against moisture and contaminants, preventing the buildup of rust and corrosion in electric vehicle gearboxes, motors, and drivetrains.

Applications of GP EV Gear Oils:

Electric Vehicle Drivetrains:

These oils are specifically formulated for use in the **gear systems** of **electric vehicles**. Whether it's a **light-duty EV**, **commercial electric vehicle**, or **electric buses**, GP EV Gear Oils help ensure smooth performance and extend the lifespan of critical drivetrain components.

Hybrid Electric Vehicles (HEVs):

GP EV Gear Oils can also be used in **hybrid vehicles** that combine traditional internal combustion engines (ICE) with electric powertrains. They are ideal for hybrid systems that feature an electric motor and gearbox for seamless integration between the two power sources.

Commercial and Heavy-Duty Electric Vehicles:

Designed to withstand the heavy-duty conditions of commercial EVs such as **electric trucks** and **buses**, these oils are formulated to handle high torque and power demands, making them perfect for **fleet operations** and **transportation solutions**.

Off-Highway and Industrial Electric Vehicles:

In addition to personal and commercial vehicles, GP EV Gear Oils are suitable for **off-highway EVs**, including **electric construction equipment**, **electric mining vehicles**, and other **industrial mobility solutions** that require high-efficiency gear lubrication under tough operational conditions.

Benefits of GP EV Gear Oils in Electric Vehicles (EVs):

- **Reduced Power Loss:** The low-friction formulation leads to a decrease in power loss within the system, improving **overall vehicle efficiency** and contributing to an extended **driving range**.
- **Longer Battery Life:** By optimizing the **efficiency** of the drivetrain, GP EV Gear Oils help reduce the strain on the vehicle's **battery**, leading to **longer battery life** and better **energy use**.
- **Fewer Maintenance Intervals:** The superior protection against wear and corrosion helps reduce the frequency of maintenance, cutting down on overall operational costs.
- **Reliable Operation:** GP EV Gear Oils ensure that electric vehicle drivetrains continue to perform reliably in **all weather conditions**, from extreme cold to high heat, ensuring dependable operation.

For technical specifications and the **Product Data Sheet (PDS)**, you can usually find detailed information through **GP (General Petrochemical)** or their authorized distributors.