ZF Friedrichshafen AG Product Datasheet



ZF Lifeguard eFluid 1

Reducer, electric engines and power electronics

Product description:

ZF Lifeguard eFluid 1 is a fully synthetic high-performance oil that has been specially developed for electric vehicles. It provides optimal lubrication and improves the performance and efficiency of reducers, electric motors and power electronics in battery-electric vehicles.

It is particularly suitable for use in electric motors of vehicles that require high power and torque and fits perfectly with the requirements of these components.

ZF Lifeguard eFluid 1 was developed to minimize specific electrical, thermal and friction losses of electric powertrains. It insulates the electrical components to reduce wear, prevent short circuits and improve vehicle performance. Material compatibility is a decisive criterion for use in electric drives.

Small containers (up to 20 I) must be shaken vigorously for at least 15 s before removing the oil. Before removing oil, large containers (more than 20 I) must be mixed with a suitable and clean stirrer (min. 1500 1 / min) for at least 60 min at room temperature.

ZF Friedrichshafen AG

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Product properties:

Product no.		
5961.308.181	Bottle	11
Characteristics (typical values)		
Color		Yellow
Density at 15°C (ASTM D4052)		0.836 kg/m³
Viscosity at 40°C (ASTM D445)		19.2 mm ² /s
Viscosity at 100°C (ASTM D445)		4.26 mm ² /s
Shearing test after 200h at 100 °C (CEC-L-45-A-99)		4.14 mm ² /s
Pour point (ASTM D5950)		-48 °C
Flash point (ASTM D92)		215 °C
Scuffing load capacity A8,3/90 (ISO 14635-1)		>14
Thermal conductivity at 30°C (ASTM D271795)		0.1407 W/m/K
Thermal conductivity at 90°C (ASTM D271795)		0.1308 W/m/K

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