

Electric Vehicle (EV) Lubricant and Fluid Tests

Gold bullets indicate ISO/IEC 17025:2017 Accreditation

Method	Test Description	Sample Size
• ASTM D92	Flash and Fire Points by Cleveland Open Cup	250 mL
• ASTM D130	Copper Strip Corrosion	100 mL
ASTM D217	Cone Penetration	800 g
• ASTM D445	Kinematic Viscosity at 100°C	125 mL
ASTM D877	Dielectric Breakdown Voltage	800 mL
• ASTM D892	Foaming Characteristics of Lubricating Oils	1 L
ASTM D924	Dissipation/Power Factor	500 mL
ASTM D1264	Water Washout (Single Temperature)	50 g
ASTM D1478	Low-Temperature Torque - Grease	10 g
ASTM D1742	Oil Separation, Storage of Greases	300 g
ASTM D1831	Roll Stability of Grease	100 g
ASTM D2265	Dropping Point	50 g
ASTM D2266	Four Ball Wear (Grease)	100 g
ASTM D2596	Four-Ball Extreme Pressure Up to 400 kg.	500 g
ASTM D2596	Four-Ball Extreme Pressure Above 400 kg.	500 g
ASTM D3336	High Temperature Bearing Performance Up to 600 Hours	50 g
ASTM D3427	Air Release, Gas Bubble Separation	500 g
ASTM D4052	Specific Gravity (Includes API Gravity)	50 mL
ASTM D4170	Fretting Wear, Grease	40 g
ASTM D4289	Elastomer Compatibility NBR L and CR Grease	400 g
ASTM D4289	Elastomer Compatibility NBR L or CR Grease	200 g
• ASTM D4683	High Temperature High Shear / TBS Viscosity at 150°C	150 mL
• ASTM D4684	TP-1 MRV Viscosity, Single Temperature	100 mL
ASTM D4693	Low-Temperature Torque, Grease	50 g
• ASTM D5185	Elemental Analysis by Inductively Coupled Plasma (No S)	10 mL
• ASTM D5293	Cold Cranking Simulator, Single Temperature	120 mL
ASTM D5706	Extreme Pressure, High-Frequency, Linear Oscillation, SRV	20 g
• ASTM D6082	Foaming, Sequence IV (Specify Option A if Required)	1 L
ASTM D6138	Corrosion-Preventive, Dynamic Wet Conditions (Emcor Test)	40 g
ASTM D6138	Corrosion-Preventive, Dynamic Wet Conditions (Emcor Test - 2 Bearings)	40 g
ASTM D6184	Oil Separation from Lubricating Grease	100 g
• ASTM D6304	Water by Karl Fischer	100 mL
• ASTM D6417	Simulated Distillation by Gas Chromatography	10 mL
• ASTM D6443	Chlorine by XRF	30mL
ASTM D7594	Fretting Wear, High Hertzian Contact, High-Frequency, Linear-Oscillation, SRV	50 g
ASTM E1269	Specific Heat Capacity by Differential Scanning Calorimetry	100 mL
CEC L-45-99	High-Temperature High Shear Viscosity	100 mL
CEC L-48	Oxidation Stability of Lubricating Oils by Artificial Aging	1 L
SAVLAB EV-CDT	Conductive Deposit Test	100 mL
SAVLAB EV-WCT	Wire Corrosion Test	200 mL

