

Physical Properties

Method	Test Description	Sample Size
ASTM D86 Mod.	Distillation by Gas Chromatograph	400 mL
• ASTM D92	Fire Point, Cleveland Open Cup	250 mL
• ASTM D92	Flash Point and Fire Point, Cleveland Open Cup	250 mL
• ASTM D92	Flash Point, Cleveland Open Cup	250 mL
• ASTM D92	Flash Point, Grease	200 g
• ASTM D93	Flash Point, Pensky-Martins Closed Cup	250 mL
ASTM D156	Color (Saybolt Chromometer Method)	250 mL
ASTM D240	Gross Heat of Combustion (Specify BTUs/Gallon)	50 mL
ASTM D240	Gross Heat of Combustion (Specify BTUs/Pound)	50 mL
ASTM D287	API Gravity of Crude Petroleum / Petroleum Products (Hydrometer)	250 mL
ASTM D323	Reid Vapor Pressure	125 mL
ASTM D566	Dropping Point Grease	50 g
ASTM D877	Dielectric Breakdown Voltage	800 mL
• ASTM D892	Foaming, Sequence I - III (Specify option A if required)	1 L
• ASTM D892 & D6082	Foaming, Sequence I - IV (Specify option A if required)	1 L
ASTM D924	Dissipation/Power Factor	500 mL
ASTM D972	Evaporation Loss (Grease) - Specify Time & Temperature	150 mL
ASTM D1120	Boiling Point of Coolants	100 mL
ASTM D1177	Freeze Point of Aqueous Engine Coolants	100 mL
ASTM D1218	Refractive Index & Refractive Dispersion	20 mL
ASTM D1298	Density / API Gravity, Hydrometer	350 mL
ASTM D1331	Surface and Interfacial Tension	100 mL
ASTM D1401	Emulsion Characteristics / Water Separability	100 mL
ASTM D1401	Emulsion Characteristics / Water Separability	100 mL
ASTM D1403	Cone Penetration, 1/4 or 1/2 Scale	100 g
ASTM D1404	Harmful Particles in Grease	30 g
ASTM D1500	Color	150 mL
ASTM D1742	Oil Separation, Storage of Greases	300 g
ASTM D1768	Water & Sediment for Opaque or In-Service Oils	100 mL
ASTM D2008	UV Absorbance to Absorptivity	10 mL
ASTM D2155	Auto-Ignition Temperature (Hydraulic Fluids)	10 mL
ASTM D2265	Dropping Point	50 g
ASTM D2500	Cloud Point	100 mL
ASTM D2595	Evaporation Loss, Grease, Wide Temperature Range	25 g
ASTM D2624	Electrical Conductivity of Aviation and Distillate Fuels	1000 mL
ASTM D2709	Water & Sediment	100 mL
ASTM D2717	Thermal Conductivity	100 mL
ASTM D2879	Vapor Pressure by Isotenoscope, Single Temperature	10 mL
ASTM D2879	Vapor Pressure by Isotenoscope, Multiple Temperatures	10 mL
ASTM D3427	Air Release / Gas Bubble Separation	500 mL
ASTM D3520	Quenching Time	600 mL
ASTM D4052	Specific Gravity (Includes API Gravity)	50 mL
• ASTM D5800	Noack Volatility	150 mL
ASTM D5800 Mod.	Noack Volatility, 150°C for 12 Hours	150 mL
ASTM D5972	Freeze Point	100 mL
• ASTM D6082	Foaming, Sequence IV (Specify option A if required)	1 L
ASTM D6184	Oil Separation %, Wire Cone Method	100 g
ASTM D6217	Particulate Contamination for Diesel Fuels	1 L
ASTM D6371	Cold Filter Plug Point	150 mL

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Method	Test Description	Sample Size
ASTM D6375	Noack Volatility by TGA	20 mL
• ASTM D6417	Simulated Distillation by Gas Chromatography	10 mL
ASTM D6793	Bulk Modulus, Up to 80°C	200 mL
ASTM D6922	Homogeneity & Miscibility	300 mL
ASTM D7213	Boiling Range Distribution of Petroleum Distillates (100°C to 615°C)	10 mL
ASTM D7321	Particulate Contamination for Biodiesel Fuels	1 L
ASTM D7619 / ISO 4406	Particle Count & Sizing (Diesel Fuels)	500 mL
ASTM D7896	Thermal Conductivity, Engine Coolants	150 mL
ASTM E659	Auto-Ignition Temperature, Liquid Chemicals	10 mL
ASTM E1269	Specific Heat	100 mL
FTM 3005	Dirt Count of Grease	5 g
FTM 321	Oil Separation, Wire Cone Method, Grease	100 g
ISO 4406	Particle Count	50 mL
SAEJ1703 COM	Compatibility	120 mL
SAEJ1703 CS	Chemical Stability	100 mL
SAEJ1703 ERBP	Equilibrium Reflux Boiling Point	200 mL
SAEJ1703 ESRB	Effect on SBR Cups	300 mL
SAEJ1703 HTS	High Temperature Stability	200 mL
SAEJ1703 OR	Oxidation Resistance	100 mL
SAEJ1703 WERBP	Wet Equilibrium Reflux Boiling Point	800 mL
SAVLAB APP	Appearance	50 mL
SAVLAB EV-CDT	Conductive Deposit Test	100 mL
SAVLAB EV-WCT	Wire Corrosion Test	200 mL
• SAVLAB LPYC	Density, Pycnometer	120 mL
SAVLAB MIC	Microscopy	10 mL
SAVLAB pH-E70	pH Determination	150 mL
SAVLAB RBP	Reflux Boiling Point	100 mL
SAVLAB TGASCAN	TGA Thermal Scan or Isotherm	5 mL



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• Gold bullets indicate ISO/IEC 17025:2017 Accreditation

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