

Grease Tests

Gold bullets indicate ISO/IEC 17025:2017 Accreditation

Method	Test Description	Sample Size
ASTM D94	Saponification Number	25 g
ASTM D217	Cone Penetration, Unworked and 60 Strokes (Grease)	800 g
ASTM D566	Dropping Point Grease	50 g
ASTM D942	Oxidation Stability (Grease) 100 Hours	150 mL
ASTM D972	Evaporation Loss (Grease) - Specify Time and Temperature	150 mL
ASTM D1092	Apparent Viscosity, Grease	500 g
ASTM D1264	Water Washout (Single Temperature)	50 g
ASTM D1264	Water Washout (Two Bearings Per Method/ Single Temperature)	100 g
ASTM D1403	Cone Penetration, 1/4 or 1/2 Scale	100 g
ASTM D1404	Harmful Particles in Grease	30 g
ASTM D1478	Low Temperature Torque - Grease	10 g
ASTM D1742	Oil Separation, Storage of Greases	300 g
ASTM D1743	Rust Prevention Properties of Grease	50 g
ASTM D1831	Roll Stability of Grease	100 g
ASTM D2265	Dropping Point	50 g
ASTM D2266	Four Ball Wear (Grease)	100 g
ASTM D2509	Timken OK Load for Grease (Specify starting load)	3400 g
ASTM D2595	Evaporation Loss, Grease, Wide Temperature Range	25 g
ASTM D2596	Four Ball Extreme Pressure (Grease) Up to 400 kg.	500 g
ASTM D2596	Four Ball Extreme Pressure (Grease) Above 400 kg.	500 g
• ASTM D2622	Sulfur by XRF - Wavelength Dispersive	30 mL
ASTM D3336	High Temperature Bearing Performance Up to 600 Hours	50 g
ASTM D3527	High Temperature Life, Wheel Bearing Grease	120 mL
ASTM D3704	Oscillation Friction Wear, Grease	20 g
ASTM D4048	Copper Strip Corrosion, Grease	100 g
ASTM D4049	Resistance of Lubricating Grease to Water Spray	25 g
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 D4290	Leakage of Wheel Bearing Grease	200 g
ASTM D4693	Low Temperature Torque, Grease	50 g
ASTM D5483	Oxidation Stability of Greases by PDSC	10 g
ASTM D5706	Extreme Pressure Properties Using SRV, Procedure A	20 g
ASTM D5706	Extreme Pressure Properties Using SRV, Procedure B	20 g
ASTM D5707	High Frequency, Linear Oscillation, SRV of Grease	20 g
ASTM D5969	Corrosion-Preventive, Dilute Synthetic Sea Water Environments	30 g
ASTM D6138	Corrosion-Preventive, Dynamic Wet Conditions (Emcor Test)	40 g
ASTM D6184	Oil Separation Percent, Wire Cone Method	100 g
ASTM D6186	Oxidation Induction Time by PDSC	20 mL
• ASTM D6304	Water by Karl Fischer	100 mL
ASTM D6482	Cooling Curve Analysis of Aqueous Polymer Quenchants	1100 mL
ASTM D7420	Tribomechanical Properties of Grease Lubricated Plastic Socket Suspension Joints Using a High-Frequency, Linear-Oscillation SRV	100 g
ASTM D7594	Fretting Wear, High Hertzian, High-Frequency, Linear-Oscillation (SRV)	50 g
ASTM D8022	Roll Stability, Presence of Water	454 g
DIN 51805	Flow Pressure, Kesternich Method	50 g
FTM-321	Oil Separation, Wire Cone Method, Grease	100 g
FTM-3005	Dirt Count of Grease	5 g
ISO 14635-1	FZG Gear Test	2 L
ISO 14635-2	FZG Gear Test (A10/16.6R/30 or A10/16.6R/90) Custom	2 L
ISO 14635-3	FZG Gear Test, Grease	3.5 L

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Method	Test Description	Sample Size
• SAVLAB IR	Fourier Transform Infra-Red, FTIR, Spectra Only	50 mL
US Steel LT-37	Grease Mobility	50 mL



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