Ratings	Tulux T600[1]	Rotella T3[2]	Delvac 1300[3]	Delo 400 LE[4]	PremiumBlue[5]	TectionExtra[6]
SAE Grade	15W-40	15W-40	15W-40	15W-40	15W-40	15W-40
Kinetic Viscosity, ASTM D445						
cSt @ 40℃	112.6	120	114	125	118	116.4
cSt @ 100℃	15.16	15.5	15	15.7	15.2	15.4
Dynamic Viscosity, CCS, ASTM D 5293						
cSt @ -20℃	5390	-	6500	6400	6500	-
Mini-rotary Viscometer (MRV), ASTM D 4684						
cP @ -25℃	16900	-	19000	26400	20000	-
High-Temp, High-Shear Viscosity, (HTHS) ASTM D 4683						
cP @ 150℃	4.3	-	4.3	-	4.2	-
SA Viscosity Index, ASTM D 2270 E Grade	140	135	137	132	134	138
NOACK volatility, ASTM D5800	9.5	-	-	-	-	-
Sulfated Ash, wt %, ASTM D 874	1.0	1.0	1.0	1.0	<1.0	1.0
Total base number, mg KOH/g, ASTM D2896	9.76	10.1	10.5	9.3	10	10
Pour Point ℃, ASTM D 97	-39	-30	-30	-33	-30	-39
Flash point (COC) ℃, ASTM D 92	230	204	236	204	-	-
Density @ 15℃, kg/l, ASTM D4052	0.874	0.879	0.876	0.8806	0.879	0.878
Phosphorus (ppm)	-	-	-	-	-	-
Sulfur	-	-	-	-	-	-
Titanium, wt %	-	-	-	-	-	-
Zinc, wt %	-	-	-	-	-	-

Specification	Explanations
SAE Grade	The viscosity classification of a motor oil according to the system developed by the Society of Automotive Engineers and now in general use. “Winter” grades are defined by viscosity measurements at low temperatures and have “W” as a suffix, while “Summer” grades are defined by viscosity at 100°C and have no suffix. Multigrade oils meet both a winter and a summer definition and have designations such as SAE 10W-30, etc.
Kinematic Viscosity, ASTM D445	The time required for a fixed amount of an oil to flow through a capillary tube under the force of gravity. The unit of kinematic viscosity is the stoke or centistoke (1/100 of a stoke). Kinematic viscosity may be defined as the quotient of the absolute viscosity in centipoises divided by the specific gravity of a fluid, both at the same temperature.
Dynamic Viscosity, Cold Crank Simulator (ASTM D-5293)	This test determines the apparent viscosity of lubricants at low temperatures and high shear rates. Viscosity of lubricants under these conditions is directly related to engine cranking and startability. The lower a lubricant’s cold crank viscosity, the easier an engine will turn over in cold temperatures. Engine oil with a 15W grade are tested at -20C and must have a viscosity below 7000 cP to meet standard.
Mini-rotary viscometer (MRV), ASTM D 4684	This test method is used to measure an engine oil’s ability to flow to the engine oil pump and provide adequate oil pressure during the initial stages of low temperature operation. Engine oil with a 15W40 grade are tested at -25C and must have a viscosity below 60,000 cP to meet standard.
High Temperature/High Shear (ASTM D-4683)	The High Temperature/High Shear Test measures a lubricant’s viscosity under severe high temperature and shear conditions that resemble highly-loaded journal bearings in fired internal combustion engines. In order to prevent bearing wear, it is important for a lubricant to maintain its protective viscosity under severe operating conditions. The High Temperature/High Shear viscosity for a 40 weight oil must be greater than 3.7 to meet SAE standards.
Viscosity Index, ASTM D 2270	A number, usually between 0 and 200, which is a measure of a fluid’s change of viscositywith temperature. The higher the viscosity index the smaller the change in viscosity with temperature. Low viscosity index (LVI) have VI.s in the range of 0 to 30. Medium viscosity index (MVI) have VI.s in the range 30 to 85. High viscosity index (HVI) oils have VI.s in the range of 85 to 110.
NOACK Volatility (ASTM D-5800)	The NOACK Volatility Test determines the evaporation loss of lubricants in high temperature service. The more motor oils vaporize, the thicker and heavier they become, contributing to poor circulation, reduced fuel economy and increased oil consumption, wear and emissions. A maximum of 15 percent evaporation loss is allowable to meet API SL and ILSAC GF-3 specifications.
Sulfated Ash, wt%, ASTM D 874	The percent by weight of residue left after the combustion of an oil sample.
Total Base Number (ASTM D-2896)	Total Base Number (TBN) is the measurement of a lubricant’s reserve alkalinity, which aids in the control of acids formed during the combustion process. The higher a motor oil’s TBN, the more effective it is in suspending wear-causing contaminants and reducing the corrosive effects of acids over an extended period of time.
Pour Point (ASTM D-97)	The Pour Point Test determines the lowest temperature at which a lubricant will flow when cooled under prescribed conditions. The lower a lubricant’s pour point, the better protection it provides in low temperature service.
Flash point (COC), C, ASTM D 92	The lowest temperature of a liquid at which it will give off sufficient vapour to form a flammable mixture with air above the liquid which will ignite momentarily when exposed to a flame.
Density @ 15C, kg/l, ASTM D4052	A measurement of mass per unit of volume.

Sources:

[1] http://www.strykerdistributors.com/diesel-engine-oil-cj-4/sm-15w-40
[2] http://www.epc.shell.com/Docs/GPCDOC_Local_TDS_United_States_Shell_Rotella_T_Triple_Protection_15W-40_(CJ-4)_(en-US)_TDS.pdf
[3] http://www.mobil.com/USA-English/Lubes/PDS/NAUSENCVLMOMobil_Delvac_1300_Super.aspx
[4] https://cglapps.chevron.com/msdspds/PDSDetailPage.aspx?docDataId=339444&docFormat=PDF
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