

Use

Motor Oil is used as a lubricant in internal combustion engines.

Test Equipment

Instrument:	Viscometer or Rheometer
Torque Range:	RV
Spindle:	YULA-15E
Accessories:	Enhanced UL Adapter, TC-550SD Programmable Refrigerated Bath
Speed:	10, 20 and 30 RPM (10W-40 motor oil); 5, 10 and 15 RPM (20W-50 motor oil)



Test Method

The Enhanced UL Adapter may be used with various Brookfield Viscometers or Rheometers. In our example, we used a Brookfield RVDV3T with RheocalcT software for automated instrument control and data acquisition. Our test temperature of 25°C was maintained by direct immersion of the Enhanced UL Adapter sample chamber into a TC-550SD Programmable Refrigerated Bath. Representative data from the analyses are shown in Figure 1.

The Figure 1 graph shows relatively constant viscosity for both motor oils at 25°C over the speed ranges tested. The 10W-40 motor oil viscosity (Red Data) was 179 cP while the 20W-50 motor oil viscosity (Black Data) was approximately 337 cP.

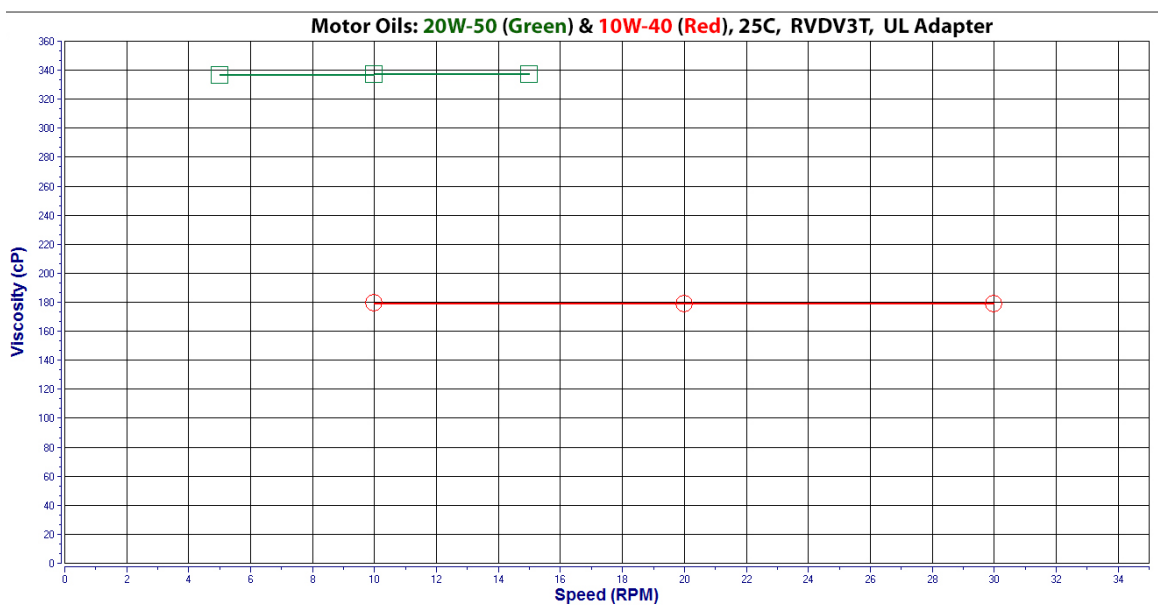


Figure 1: Motor Oils at 25°C

SETTING THE STANDARDS in Viscosity Testing