



TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

S3 MOTOR OIL ADDITIVE

TEST	METHOD	RESULTS
SAE GRADE	SAE J300	20w-30
GRAVITY SP @ 60°F	ASTM D-287	0.9986
VISCOSITY @ 40°C	ASTM D-445	54.63
VISCOSITY @ 100°C	ASTM D-445	9.57
VISCOSITY INDEX	ASTM D-2270	161
FLASH POINT, °C	ASTM D-93	374
POUR POINT, °C	ASTM D-97	-22



SAE GRADE	<p>SAE International (SAE) is a professional organization for mobility engineering professionals in the aerospace, automotive, and commercial vehicle industries. The Society is a standards development organization for the engineering of powered vehicles of all kinds, including cars, trucks, boats, aircraft, and others.</p>
SPECIFIC GRAVITY, °	<p>The ratio of the mass of a solid or liquid to the mass of an equal volume of distilled water at 4°C (39°F) or of a gas to an equal volume of air or hydrogen under prescribed conditions of temperature and pressure. Also called <i>relative density</i>.</p>
VISCOSITY INDEX	<p>Viscosity Index highlights how a lubricant's viscosity changes with variations in temperature. Many lubricant applications require the lubricant to perform across a wide range of conditions: for example, in an engine. Automotive lubricants must reduce friction between engine components when it is started from cold (relative to engine operating temperatures) as well as when it is running (up to 200 °C). The best oils (with the highest VI) will not vary much in viscosity over such a temperature range and therefore will perform well throughout.</p>
FLASH POINT	<p>The flash point of a flammable liquid is the lowest temperature at which it can form an ignitable mixture in air. At this temperature the vapor may cease to burn when the source of ignition is removed. A slightly higher temperature, the fire point, is defined as the temperature at which the vapor continues to burn after being ignited. Neither of these parameters is related to the temperatures of the ignition source or of the burning liquid, which are much higher. The flash point is often used as one descriptive characteristic of liquid fuel, but it is also used to describe liquids that are not used intentionally as fuels.</p>
POUR POINT	<p>The pour point of a liquid is the lowest temperature at which it will pour or flow under prescribed conditions. It is a rough indication of the lowest temperature at which oil is readily pumpable. Also, the pour point can be defined as the minimum temperature of a liquid, particularly a lubricant, after which, on decreasing the temperature, the liquid ceases to flow.</p>