Petroleum products

Engine oil

SAE viscosity and API service category

SAE 40 · API SF/CD



Material illustration

Technical characteristics

Engine oil, SAE 40 · API SF/CD. SAE identifies the viscosity class and API identifies the engine service category.

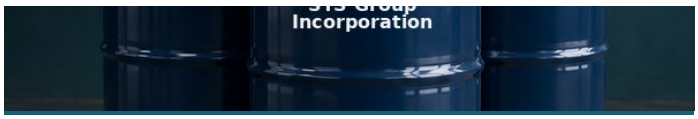
Property	Reference value	Method or source
Viscosity at 100 °C	**12.5 ≤ ν < 16.3 mm²/s**	SAE J300
Service category	**API SF/CD**	API
HTHS · 150 °C	**≥ 3.7 mPa·s**	SAE J300
Kinematic viscosity	**ASTM D445**	ASTM D445

Under SAE J300 the kinematic viscosity band at 100 °C is 12.5 ≤ ν < 16.3 mm²/s. ASTM D445 measures this property. High-temperature, high-shear viscosity (HTHS) is a separate measurement. This monograde carries no separate W winter rating.



Applications

For petrol engines whose service manual specifies SAE 40 and API SF/CD. Mixed fleets also need to account for engine type and cold-start conditions. This service category was developed for earlier engine generations. Modern equipment requires the level in its own manual.



Packaging and receipt

Packs suit individual service jobs and drums suit workshops with pump dispensing. IBCs or bulk delivery can be agreed for central stores. Each container is identified by fluid and lot.

For acceptance, check the agreed specification and the certificate of analysis (COA) for the delivered lot.