Petroleum products

Hydraulic oil

Fluid for hydraulic power systems

ISO VG 46



Material illustration

Technical characteristics

Hydraulic oil ISO VG 46 transmits power from the pump to actuators and lubricates moving interfaces. The ISO VG number denotes nominal viscosity at 40 °C.

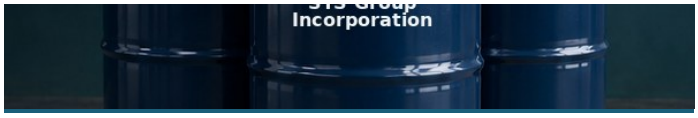
Property	Reference value	Method or source
Viscosity at 40 °C	**41.4–50.6 mm²/s**	ISO 3448
Classification	**ISO 3448**	ISO 3448
Nominal viscosity at 40 °C	**46 mm²/s**	ISO 3448
Band around nominal	**±10 %**	ISO 3448
Kinematic viscosity	**ASTM D445**	ASTM D445

The ISO 3448 kinematic viscosity band at 40 °C is 41.4–50.6 mm²/s, measured by ISO 3104 or ASTM D445. Performance class and filtration requirements depend on the machine.



Applications

For machine-tool, press and industrial power units specifying ISO VG 46. Operating temperature, pump design, anti-wear performance and fluid cleanliness also influence selection.



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.