



GRANIT

VDS



DESCRIPTION

GRANIT VDS is a top tier midSAPS HDDEO. It has been engineered to satisfy the strict requirements of new generation diesel engines with particulate filters and other after-treatment systems. It is manufactured with extremely high quality and thermal stability, severely hydrotreated base oils and TriboACT® Formula, which enable the product to offer excellent overall protection to the engine and turbocharger unit. GRANIT VDS SAE 10W-40 has been designed to protect and complement expensive engine components, to provide for normal to extended drain intervals and confidence to a number of OEMs who acknowledge its performance level and quality by issuing approvals to its name.

APPLICATIONS

GRANIT VDS is suitable for all types of diesel engines of Euro IV/V/VI, US EPA 2007/2010 generation and on-/off-highway, stage IIIB and Tier IV heavy duty units that require performance levels defined as by API CK-4/CJ-4/SM and ACEA E9 or E7 or/and operate with diesel fuel running on low sulfur fuel (<15ppm). It is a versatile, midSAPS SHPD engine oil that is equally suitable for older generation engines (Euro II or Euro III) that run on higher sulphur fuels (up to 500 ppm).

CHARACTERISTICS-BENEFITS

CHARACTERISTICS	BENEFITS
Engineered with TriboACT® Formula.	Superior soot wear protection; elevated turbocharger protection.
Unconventional basestock formulation.	Reduced oil consumption; wide range of temperature applications.
Excellent thermal stability.	Full engine protection even at temperatures as low as -33°C.
Super high performance diesel oil.	Enhanced drain intervals; intended for heavy duty environments.
Full exhaust after-treatment technologies compatibility.	Low ash, phosphorus and sulphur formula, preventing damage to exhaust after-treatment devices and protecting the environment.

PHYSICAL-CHEMICAL CHARACTERISTICS

GRANIT VDS	METHOD	SAE 15W-40	SAE 10W-40	SAE 10W-30
Density at 15°C, g/cm ³	ASTM D1298	0.872	0.865	0.864
Dynamic Viscosity, °C /cP	ASTM D5293	-20°C/6,250	-25°C/6,450	-25°C/6,450
Viscosity, Kinematic (cSt) 100°C	ASTM D445	14.93	14.5	11.9
Viscosity, Kinematic (cSt) 40°C	ASTM D445	109.1	95.7	81,6
Viscosity index	ASTM D2270	136	159	140
TBN, mgKOH/g	ASTM D2896	10	10	10
Flash point, COC, °C	ASTM D92	236	232	228
Pour point, °C	ASTM D97	-30	-33	-33

The above-mentioned characteristics represent typical/mean values.

SPECIFICATIONS

SAE 10W-40

API CK-4, CJ-4, CI-4+, CI-4, SM; ACEA E9, E7; MB 228.31; Volvo VDS-4; MAN M3775, M3575; MTU Cat. 2.1; Mack EO-O Premium Plus; Renault Trucks RLD-3; Caterpillar ECF-3, ECF-2, ECF-1a; Cummins CES 20081; Detroit Diesel DFS 93K218; Deutz DQC III-10 LA; Global DHD-1
Level: JASO DH-2

SAE 15W-40

API CK-4, CJ-4, CI-4+, CI-4, SM, SN; ACEA E9, E7; MB 228.31; MAN M3775, M3575; MTU Cat. 2.1; Mack EO-O Premium Plus; Renault Trucks RLD-3; Volvo VDS-4; Caterpillar ECF-3, ECF-2, ECF-1a; Cummins CES 20081; Detroit Diesel DFS 93K218; Deutz DQC III-10 LA; Global DHD-1
Level: JASO DH-2

SAE 10W-30

ACEA E9, E7; API CK-4; Caterpillar ECF-3; MB 228.31; MAN M3775; MTU Cat. 2.1, Volvo VDS-4.5; Mack EOS-4.5; Renault Trucks RLD-4; Deutz DQC III-10 LA; Detroit Diesel DFS 93K222; Cummins CES 20086

APPROVALS

SAE 15W-40

API CK-4, CI-4+, SN; MB-Approval 228.31; Mack EO-O Premium Plus; Renault Trucks RLD-3; Volvo VDS-4

SAE 10W-40

API CK-4, CI-4+; Volvo VDS-4; Mack EO-O Premium Plus; Renault Trucks RLD-3