

TITAN UNIVERSAL HD

High-performance mono-grade oils for diesel engines. Specially developed for off-road vehicles.

Description

TITAN UNIVERSAL HD is used for the necessary streamlining of lubricants, above all for vehicle and equipment fleets. The right engine oil is available with TITAN UNIVERSAL HD. Whether continuously at full throttle or in STOP and GO operation, TITAN UNIVERSAL HD protects against wear, deposits and corrosion all the time with the lowest oil consumption. Another important point for use in practice: engines lubricated with TITAN UNIVERSAL HD have no sacrifices in performance because of unallowable deposits in the combustion chambers. TITAN UNIVERSAL HD provides for proper function of hydraulic valve lifters (hydraulic valve compensation) even during extended oil change intervals.

Application

TITAN UNIVERSAL HD is miscible and compatible with similar mono-grade and multi-grade engine oils. Engine flushing, etc. is not necessary during the changeover to TITAN UNIVERSAL HD.

Advantages/Benefits

- No residue in the combustion chambers, on valve and piston or on exhaust gas turbines of turbochargers
- TITAN UNIVERSAL HD is active over the long term and makes possible the full utilization of the oil and filter change intervals

- TITAN UNIVERSAL HD offers the lowest oil consumption
- TITAN UNIVERSAL HD SAE 30 is especially recommended for power shift transmissions in CATERPILLAR machines, all year round
- TITAN UNIVERSAL HD 50 is specified for lateral drives of CATERPILLAR chain-driven equipment
- With TITAN UNIVERSAL HD 30, there is no clutch slipping, even under extreme load

Specifications

- ACEA E2
- API CF

Approvals

- DEUTZ DQC I-02 (SAE 30, 40 & 50)
- MAN 270 (SAE 10W, 20W20, 30 & 40)
- MAN M 3275-2 (SAE 50)
- MB-235.12 (SAE 40)
- MB-235.27 (SAE 20W20)
- MB-228.0 (SAE 10W, 20W20 & 50)
- MB-228.2 (SAE 30 & 40)
- MTU DDC TYP-2 (SAE 30 & 40)
- ZF TE-ML 04B (SAE 30 & 40)
- ZF TE-ML 03B (SAE 10W)
- VOITH-RETARDER "A" (SAE 20W20)

FUCHS Recommendations

- MIL-L-2104 D
- ALLISON C-4
- CAT TO-2
- ZF TE-ML 02C
- API CF-2 (SAE 40 Only)

CHARACTERISTICS

TITAN UNIVERSAL HD 10W

Density @ 35 °C	0,887	g/ml	ASTM D 4052
Flash Point, CoC	218	°C	ASTM D 92
Pour Point	-33	°C	ASTM D 97
Kinematic Viscosity @ 40 °C	46	mm ² /s	ASTM D 445
Kinematic Viscosity @ 100 °C	7	mm ² /s	ASTM D 445
Viscosity Index	113	-	ASTM D 2270
TBN	9.5	mg KOH/g	ASTM D 2896

TITAN UNIVERSAL HD 20W20

Density @ 35 °C	0.878	g/ml	ASTM D 4052
Flash Point, CoC	228	°C	ASTM D 92
Pour Point	-24	°C	ASTM D 97
Kinematic Viscosity @ 40 °C	65	mm ² /s	ASTM D 445
Kinematic Viscosity @ 100 °C	8.8	mm ² /s	ASTM D 445
Viscosity Index	109	-	ASTM D 2270
TBN	9.5	mg KOH/g	ASTM D 2896

TITAN UNIVERSAL HD 30

Density @ 35 °C	0.893	g/ml	ASTM D 4052
Flash Point, CoC	222	°C	ASTM D 92
Pour Point	-21	°C	ASTM D 97
Kinematic Viscosity @ 40 °C	100	mm ² /s	ASTM D 445
Kinematic Viscosity @ 100 °C	11.6	mm ² /s	ASTM D 445
Viscosity Index	104	-	ASTM D 2270
TBN	9.5	mg KOH/g	ASTM D 2896

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While the information and figures given here are typical of current production and confirm to specification, minor variations may occur. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the product

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ISO 9001:2008
ISO 14001:2004
OHSAS 18001:2007
CERTIFIED





TITAN UNIVERSAL HD 40

Density @ 35 °C	0.898	g/ml	ASTM D 4052
Flash Point, CoC	244	°C	ASTM D 92
Pour Point	-15	°C	ASTM D 97
Kinematic Viscosity @ 40 °C	161	mm ² /s	ASTM D 445
Kinematic Viscosity @ 100 °C	16	mm ² /s	ASTM D 445
Viscosity Index	102	-	ASTM D 2270
TBN	9.5	mg KOH/g	ASTM D 2896

TITAN UNIVERSAL HD 50

Density @ 35 °C	0.902	g/ml	ASTM D 4052
Flash Point, CoC	237	°C	ASTM D 92
Pour Point	-15	°C	ASTM D 97
Kinematic Viscosity @ 40 °C	205	mm ² /s	ASTM D 445
Kinematic Viscosity @ 100 °C	19.5	mm ² /s	ASTM D 445
Viscosity Index	108	-	ASTM D 2270
TBN	9.5	mg KOH/g	ASTM D 2896

