ALPINE® Turbo plus LA 10W-40

High-performance low viscosity engine oil

Properties	ALPINE Turbo plus LA 10W-40 is an HC-synthetic high-per- formance low viscosity engine oil for commercial vehicles with strongly reduced content of sulphated ash, phosphorus and sulphur (Low SAPS). The use of high performance additives ensures excellent oxidation and high temperature stability. A good dispersing capacity and the associated piston cleanliness prevent deposits in the engine, which could possibly lead to a drop in performance. At very low external temperatures a safe cold start and fastest possible supply of all lubrication points is guaranteed. Extreme loads are safely controlled, friction losses and wear are reduced. Economic efficiency is significantly improved by low oil and fuel consumption as well as by longer service life of the units.
Application notes	 ALPINE Turbo plus LA 10W-40 was developed especially for the economic supply of exhaust-optimised engines (Euro V and Euro VI) with exhaust gas after treatment systems. ALPINE Turbo plus LA 10W-40 can be used all year round and maintains the effectiveness of the exhaust gas treatment systems over very long running times.
Service description	 Specifications: ACEA E6/E7/E9 API CK-4 Approvals: MB-Approval 228.51 Volvo VDS-4.5 Mack EOS-4.5 Renault VI RLD-3 Recommendation*: CAT ECF-3 Cummins CES 20086 DAF HP-2 DDC93K222 Deutz DQC IV-18 LA JASO DH-2 MAN M 3271-1, M 3477 MTU Type 3.1 Renault Truck RXD/RGD Scania LA Volvo CNG

* meets the requirements of the OEM manufacturer. The stated values may vary within the usual commercial range. MIAN

ALPINE® Turbo plus LA 10W-40

TYPICAL PARAMETERS	METHODS	UNITS	ALPINE Turbo plus LA 10W-40
Density at 15°C	DIN 51 757	kg/m³	857
Viscosity at 40°C	DIN 51 562	mm²/s	100
Viscosity at 100°C	DIN 51 562	mm²/s	15.4
Viscosity Index (VI)	DIN ISO 2909	-	163
Viscosity at -25°C	DIN 51 377	mPa.s	4550
Pour point	DIN ISO 3016	°C	-33
Flash point COC	DIN ISO 2592	°C	230
TBN	DIN ISO 3771	mg KOH/g	9.3
Sulphated ash	DIN 51 575	mass. %	0.96
Sulfur		mass. %	0.28
Phosphorus		mass. %	0.08

* meets the requirements of the OEM manufacturer. The stated values may vary within the usual commercial range.

MIAN