

Engine oils for trucks and machinery

TURDUS POWERTEC 1000 SAE 15W-40

High quality mineral engine oil designed for lubrication of heavy-loaded compression-ignition high-power engines with or without turbochargers. It is particularly recommended for the engines of trucks, farm tractors, buses, long-distance coaches as well as other high-performance vehicles (high mileages in short period of time), if the manufacturer allows the use of this quality and viscosity grade oil.

Characteristics:

- compatible with engines that meet EURO 3 emission standards and selected engines that meet EURO 4 and Euro 5 emission standards
- guarantees highest level of effectiveness of the power unit (by preventing residua and carbon fouling production as well as preventing wear and tear of lubricated elements).
- conventional SAPS level not suitable for use in vehicles equipped with exhaust cleaning system of solid particles filters (DPF)

No	Requirements	Research methods by	Unit	Value
1.	Kinematic viscosity at 100°C	ASTM D 445	mm²/s	14,0-16,3
2.	Pour point, not higher than	ASTM D 97	°C	-30
3.	Flash point, not lower than	ASTM D 92	°C	215
4.	Base number, not lower than	ASTM D 2896	mgKOH/g	12
5.	Viscosity index, not lower than	ASTM D 2270		130
6.	Structural viscosity at -20° C, not higher	ASTM D 5293	mPa*s	7000
	than			
7.	Sulfated ash, not higher than	ASTM D 874	% m/m	1,6

The above data consists of values typical for a production batch, which are not included in technical specifications, and are subject to change due to continual product research and development.

Specifications, classifications:

SAE 15W-40 API CI-4/SL ACEA E7 GLOBAL DHD-1

Approved by:

MB-Approval 228.3, VOLVO VDS-3/RENAULT VI RLD-2/ MACK EO-N, DEUTZ DQC III-10, MAN M 3275-1, MTU Type 2,



Meets the requirements of:

CUMMINS CES 20078, CAT ECF-2

Storage:

All packages should be stored under a roof. If they are stored in the open air where they can be exposed to atmospheric conditions - rain, they should be placed in a horizontal position, so as to prevent ingress of water and prevent the destruction of marking, it is best to use canvas.

The product can not be stored at a temperature higher than 60 $^{\circ}$ C, can not be exposed to direct sunlight or temperatures below 0 $^{\circ}$ C. The expiry date for use under the conditions of storage is 3 years.

Health, Occupational Health and Safety, Environment:

Safety information is included in the Materials Safety Data Sheet (MSDS Safety Data Sheet). It contains detailed information on the potential hazards, precautions and First Aid measures, together with information on the impact on the environment and the disposal of used products.

LOTOS Oil Sp. z o. o. and cooperating companies do not take responsibility for the consequences of improper product use or non-use of the precautions. Before using the product for purposes other than those listed, please consult your local LOTOS Oil Sp. z o. o. office.

Data contained in this document does not constitute an offer within the meaning of the Act of 23 April 1964 - Civil Code. LOTOS Oil Sp.z o.o. assumes no responsibility for any consequences of the use of the information contained herein, in particular when deciding on trade and investment. All data contained herein are typical of those obtained with normal production batch, they may vary slightly due to characteristics of the production process, as well as due to continuous product development. Data contained in this document may be subject to change. LOTOS Oil Sp.z o.o.is not responsible for the availability of the product.

Developed: Piotr Niemiec (piotr.niemiec @lotosoil.pl)

Updated: 28.03.2018