# PRODUCT DATA SHEET IT-TEDEX/2010/111 AUTOMOTIVE OILS









# Tedex SHPD VDS -4 LSP Motor Oil

engine oil

### **Product description:**

Tedex SHPD VDS4 LSP Motor Oil is a multigrade engine oil formulated through the high technology of "low- SAPS" additives that stands for the low level of sulfur ash (SA), phosphorus (P) and sulfur (S). This innovative formulation allows for time extension of trouble- free DPF filter's performance, excellent engine protection, reduction of fuel consumption, minimization of exhaust fumes emission. The supporting power is additionally simulated by the use of high quality base oil characterized with good viscosity and temperature properties which improves the activity of additives. It guarantees better protection against wearing, deposits formation and increases the resistance on thermal disintegration in high temperatures, compared to previous oils generation. The latest "low SAPS" formulation allows to protect filters and catalytic converters mounted in exhaust systems of modern, low emission vehicles. It is recommended by many manufacturers and it can be used both in modern, low emission vehicles (Euro 4,5, US 2007) and in older models.

## Specifications and Approvals

Viscosity grade SAE:	15W-40			
Quality class by API:	CJ-4, Cl-4+, Cl-4, CH-4, CG-4, CF-4, CF-2, CF/SN			
Quality class by ACEA:	E9-12, E7-12			
Caterpillar	ECF-3, ECF-2, ECF-1-a			
Cummins	CES 20081, 20076			
Detroit Diesel	DDC 93K-218 tylko SAE:15W-40			
Deutz	DQC III-10 LA			
MAN	M3575			
МВ	228.31			
MACK	EO-O Premium Plus			
Renault Truck	RLD-3, RD/RD-2			
Volvo	VDS-4, VDS-3, VDS-2			
МТИ	Oil type 2.1, MTU Type 1			
WT-TEDEX	2010/111 wyd. III			

Tedex SHPD VDS4 LSP Motor Oil oil is designed to lubricate high loaded Diesel engines running under very difficult conditions and equipped with fumes extraction system: Selective Catalytic Reduction of NOx (SCR), Exhaust Gas Recirculation (EGR) and Diesel Particulate Filters (DPF). It is HD (Heavy Duty) type oil which guarantees the highest performance, excellent protection for almost all engines including the latest ones that fulfill the pollutant emission limits on Euro 5 and US 2007 levels as well as older generation engines.

It is suitable for agricultural and construction machinery, even while using high sulfur content fuel. The oil guarantees proper engine performance in all climate zones that is why it can be successfully used by international transport companies. It protects the engine against wear through a metal on metal friction during long lasting high load that is characterized for vehicles in international transport.

**Tedex SHPD VDS4 LSP Motor Oil** is recommended for trucks with high mileage what makes longer oil change intervals possible up to 45 000 km, and up to 60 000 km while using side filters. One should comply strictly with recommendations of engines producers..

#### **Features**

The appropriate selection of raw materials in the formulation of **Tedex SHPD VDS4 LSP Motor Oil allows** to achieve excellent operating properties:

- anti oxidizing properties- prevent from forming acids, waxes, deposits, soot and increase viscosity as a result of oil oxidation
- improved system of acids neutralization helps float operators in obtaining maximum flexibility of extending distances between oils changes
- modern low ash formulation prevents form blocking filters and poisoning catalysts in exhaust systems. It enables to keep the emission level in accordance with law and affects in reduction of fuel consumption
- washing and dispergating properties- keep the engine's elements clean even during long periods of exploitation
- anti wear properties- protect to a high extent against the engine wear
- anti corrosive and anti rust properties provide effective engine protection during the whole period of its performance even while using high sulfur content diesel oil

#### **Application**

 viscosity and temperature properties- guarantee easy engine start-up in winter conditions and appropriate engine lubrication

**Tedex SHPD VDS4 LSP Motor Oil** is mixable with other oils from similar quality class, home- made and foreign production.

## Physical and chemical properties – typical values

Tedex SHPD VDS -4 LSP Motor Oil		15W-40	range	
Kinematic viscosity at 40 °C (ASTM D445)	mm2/s	115,1	≥115	
Kinematic viscosity at 100 °C ( ASTM D445)	mm2/s	15,10	≥15	
Viscosity index ( ASTM D2270)	-	136	>135	
Flashpoint COC ( ASTM D92)	°C	232	>220	
Pour point (ASTM D97)	°C	-33	<-33±2	
Total base number (TBN) ( <i>ASTM D2896</i> )	mgKOH/	10,10	>10,0	

Above parameters are standard data, we reserve the right to change them due to technical progress

## Industrial Safety and Fire-fighting properties

All safety information is included in the product's Material Safety Data Sheet, which contains detailed information concerning potential threats, safety pre-cautions and first aid measures, as well as information concerning the product's impact on the environment and disposal considerations.

## Storage and transport

**Tedex SHPD VDS4 LSP Motor Oil** oils shall be stored in closed containers, which protect the oils from moisture, water and mechanical impurities. The recommended storage temperature range is 5°C - 35 °C. The oil can be transported by means of road and rail transport, both in bulk and in barrels – it does not generate danger.

## Any information on the application of TEDEX's oils and grease can be obtained at:

TEDEX S.A.

97-200 Tomaszów Mazowiecki, Cygan 2 Tel. (0-44) 724 95 62, (0-44) 725 29 15



**TEDEX S.A.** z siedzibą w Warszawie ul.Człuchowska 68A, 01-360 Warszawa.

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ZAKŁAD PRODUKCJI OLEJÓW W TOMASZOWIE MAZOWIECKIM

97-200 Tomaszów Mazowiecki, ul. Cygan 2 , tel. (+48) 44 724 95 62, fax. (+48) 44 725 29 15 www.tedex.pl, www.wrc.tedex.pl