



**SCOPE Denim 2050 – API CF/SF**

SCOPE DENIM - 2050 lubricants are high quality diesel engine oils designed to use in naturally aspirated and turbo charged diesel engines. It is formulated with high quality paraffin base oils with detergent, dispersant, anti wear, anti corrosion and antifoam additives to give the benefit of neutralizing acidic byproducts of combustion, keeps piston rings deposit free and perfect against wear of high loaded valve drain components.

➤ **Main benefits**

- High oxidation and thermal stability.
- Advanced detergent additive technology provides controlled cylinder and piston ring deposits.
- Keeps engine clean.
- Longer drain interval.
- Prolong engine life.

➤ **Application**

SCOPE Denim 2050 oils can be used under normal conditions for mixed fleet of diesel and gasoline engines and is suitable under severe service condition in truck and buses. It is used in both two-cycle and four-cycle engines, extending life between overhaul in high speed/load, pickup delivery operation.

➤ **Specification**

SCOPE Denim - 2050 meets and exceeds the requirement of API CF/SF, MIL-L-2104D, MIL-L-46152C, MB 227.0/227.5, \GM Allison C-3/C-4, CCMC D1/D2, G2.PD1, MAN 270, CAT – TO2.

**Typical Physical Characteristics**

SAE Viscosity Grades	30	40	50	15W/40	20W/50	20W/40
Viscosity, cSt @ 100 <sup>o</sup> c	12.00	15.00	19.00	15.00	18.50	15.0
Viscosity Index	98	96	95	136	125	115
Pour Point	-18	-15	-12	-27	-24	-24
Flash Point COC	238	248	258	218	230	230
TBN ASTM D 2896	10.00	10.00	10.00	10.00	10.00	10.00
Apparent Viscosity - Cp				6400 -20 <sup>o</sup> c	8000 -15 <sup>o</sup> c	7800 -15 <sup>o</sup> c