



DELO[®] 400 MULTIGRADE

SAE 15W-40

PRODUCT DESCRIPTION

“The Delo[®] Performance Advantage™”

Delo[®] 400 Multigrade SAE 15W-40 is a mixed fleet motor oil recommended for naturally aspirated and turbocharged four-stroke diesel engines and four-stroke gasoline engines in which the API CI-4 Plus service category and SAE 15W-40 viscosity grade are recommended.

CUSTOMER BENEFITS

Delo 400 Multigrade SAE 15W-40 is a premium quality engine oil designed for pre-2007 engines and higher sulfur fuels (500 ppm and above). Please use Delo 400 LE (Low Emission) for 2007 Exhaust Gas Recirculation (EGR) with Diesel Particulate Filter (DPF) and 2010 EGR with DPF and EGR/Selective Catalytic Reduction (SCR) with DPF low emission engines.

It delivers value through:

- **Minimized operating costs** — Exceptional soot dispersancy and wear control. Cylinders, pistons, rings, and injectors are well protected against wear and corrosion, providing optimum service life and minimal maintenance. Contributes to maximum vehicle utilization and minimal downtime. Backward compatible with previous API Oil categories and pre-2007 engine models. For use in four-stroke gasoline and all naturally aspirated turbocharged and modern electronically controlled/low emission diesel engines manufactured before 2007. One oil that meets the engine performance requirements of most North American, European, and Asian engine manufacturers.

- **Warranty Plus protection** — Bumper-to-bumper warranty protection from the engine to the drive train. Payment for Chevron lubricant-related damage to your equipment, including parts and labor.¹ Problem resolution and technical advice from Chevron's lubrication experts.
- **Access to Chevron's lubrication and industry knowledge** — Help maximize your bottom line business results.

FEATURES

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Delo 400 Multigrade SAE 15W-40 is formulated with ISOSYN[®] Technology. ISOSYN Technology combines an optimal blend of the latest technology in dispersant, detergent, oxidation inhibition, antiwear, corrosion inhibition, viscosity improver, and defoaming additives to create a product that rivals synthetics in critical performance tests.

¹ See Warranty Plus for details and restrictions.

Product(s) manufactured in the USA.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

A **Chevron** company product

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FUNCTIONS

Delo® 400 Multigrade SAE 15W-40 contributes to keeping rings clean and free for optimal combustion pressure and for minimal wear. Delo 400 Multigrade SAE 15W-40 controls valve and piston crown land deposits, thus managing oil consumption. Its high level of ashless dispersants helps keep fuel soot in suspension and thus minimizes the risk of filter plugging, heavy cylinder head sludge, abrasive polishing wear, high viscosity increase, and oil gelling. These problems can result in excessive engine wear and bearing failure on startup, without prior indication to the operator.

Specially selected oxidation inhibitors control oxidation, sludge, and undue thickening during oil drain periods. Delo 400 Multigrade SAE 15W-40's unique blend of extreme pressure antiwear additive protects against valve train wear and scuffing of highly loaded parts operating under boundary lubrication. A specially selected viscosity index improver helps ensure easy flow at low temperatures and excellent film protection in hot engine areas. A defoaming additive helps to prevent air entrapment.

APPLICATIONS

Delo 400 Multigrade SAE 15W-40 is a mixed fleet motor oil recommended for naturally aspirated and turbocharged four-stroke diesel engines and four-stroke gasoline engines in which the API CI-4 PLUS category and SAE 15W-40 viscosity grade are recommended. It is formulated for engines operating under severe service and a wide range of climatic conditions.

Delo 400 Multigrade SAE 15W-40 is excellent for use in engines equipped with features like four-valve heads, supercharging, turbocharging, direct injection, shorter piston crowns, higher power density, intercooling, full electronic management of fuel and emissions systems, exhaust gas recirculation, and exhaust particulate traps.

This product is recommended for use in pre-2007 engines.

Chevron's primary recommendation for two-stroke diesel engines is Delo 100 Motor Oil SAE 40 or 50, specifically for the Detroit Diesel Series 149 engine.

Delo 400 Multigrade SAE 15W-40 is approved for:

- **API Service Categories** CI-4 PLUS, CI-4, CH-4, CG-4, CF-4¹, CF, CE¹, CD¹, SL, SJ, SH¹, SG¹
- **Cummins** CES 20078, 20077, 20076, 20071
- **Daimler** MB Approval 228.3
- **DDC** Power Guard 93K214
- **Deutz** DQC-III-10
- **Mack** EO-N Premium Plus 03, EO-N Premium Plus, EO-M PLUS, EO-M
- **MAN** 271, M3275
- **MTU** Categories 1 and 2
- **Renault** RLD-2
- **Volvo** VDS-3, VDS-2, VDS
- **ZF** TE-ML 04C

Delo 400 Multigrade SAE 15W-40 meets the performance requirements of:

- **ACEA European Service Categories** E7-04 Issue 2, E2-96 Issue 4
- **JASO Asian Service Categories** DH-1
- **Global Service Categories** DHD-1
- **Caterpillar** ECF-2, ECF-1a
- **major diesel engine manufacturers' requirements**

Caterpillar	J.I. Case
Cummins	John Deere
DAF	Komatsu
Daimler	Kubota
Detroit Diesel	Mack
Deutz	MAN
Fiat/Allis	Mercedes
Ford	Mitsubishi
GMC/GM	MTU
Hino	Navistar
International	Nissan
Isuzu	Renault
Iveco	Scania
	Volvo

- **engine test performance requirements**
 - **Engine Manufacturers Association (EMA)** LRG-1¹

¹ Obsolete specification

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

TYPICAL TEST DATA

SAE Grade	15W-40
<i>Product Number</i>	235101
<i>MSDS Number</i>	25228
API Gravity	29.0
Viscosity, Kinematic cSt at 40°C cSt at 100°C	125 15.2
Viscosity, Cold Crank, °C/Poise	-20/65, 64
Viscosity Index	125
Flash Point, °C(°F)	238(460)
Pour Point, °C(°F)	-31(-23)
Sulfated Ash, wt %	1.40
Base Number, ASTM D2896	11
Phosphorus, wt %	0.119
Zinc, wt %	0.148

Minor variations in product typical test data are to be expected in normal manufacturing.

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