



DELO[®] 400 XLE

SAE 10W-30 (Synthetic Technology)



PRODUCT DESCRIPTION

“Delo. Let’s go further.[®]”

Delo[®] 400 XLE SAE 10W-30 with ISOSYN[®] Advanced Technology is a premium synthetic technology fuel economy and mixed fleet engine oil recommended for naturally aspirated and turbocharged four-stroke diesel engines and four-stroke gasoline engines in which the API CK-4, API SN or API SN PLUS service category and SAE 10W-30 viscosity grade are recommended.

CUSTOMER BENEFITS

Delo 400 XLE SAE 10W-30 (Synthetic Technology) with ISOSYN Advanced Technology is an API CK-4 heavy duty engine oil specifically formulated for on-highway applications, including 2017 greenhouse gas (GHG 17) compliant diesel engines with lower CO₂ emissions, and 2010 compliant low emission diesel engines with Selective Catalytic Reduction (SCR), Diesel Particulate Filter (DPF) and Exhaust Gas Recirculation (EGR) systems calling for SAE 10W-30 heavy duty engine oil.

Delo 400 XLE SAE 10W-30 with ISOSYN Advanced Technology is also recommended for off-highway applications when SAE 10W-30 viscosity grade is required. It is formulated for newer engines with Selective Catalytic Reduction (SCR), Diesel Particulate Filter (DPF) and Exhaust Gas Recirculation (EGR) systems. These newer engines generally meet Tier IV (2014) emissions requirements.

It is fully compatible with previous engine models and previous API Oil Service Categories.

Delo 400 XLE SAE 10W-30 delivers value through:

- **Improved Fuel Efficiency** — Up to 1% improvement vs. SAE 15W-40 oils in Class 8 diesel engine bench testing.

- **Better Low Temperature Pumpability** — Improved flow rate and pumpability versus SAE 15W-40 oils.
- **Exceptional Deposit Control** — Provides high performance piston deposit control and turbocharger protection due to its superb oxidation performance. Its high performing detergent and dispersant additives allows for extended diesel engine component protection.
- **Minimized Operating Costs** — Exceptional soot dispersancy and wear control. Cylinders, pistons, rings, and valve train components are well protected against wear and corrosion, providing optimum service life and minimal maintenance. Contributes to maximum vehicle utilization and minimal downtime.
- **Excellent Emission Control System Life** — Provides long Diesel Particulate Filter (DPF) life for minimal downtime and cleaning, thus managing your maintenance costs.
- **Managed Inventory Costs** — Backwards compatible with previous API Oil Service Categories. Suitable for use in four-stroke gasoline and naturally aspirated turbocharged and modern electronically controlled/low emission diesel engines calling for an SAE 10W-30 heavy duty engine oil. Allows users with a wide mix of engine brands to enjoy simplified inventory and dispensing systems that may contribute to saving money, space and handling time.
- **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.

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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- **Access to Chevron's Lubrication and Industry Knowledge** — Helps to maximize your bottom line business results.

FEATURES

Delo® 400 XLE SAE 10W-30 with ISOSYN® Advanced Technology is formulated using advanced additive technology to provide outstanding protection and improved fuel efficiency for on highway applications including 2010 compliant engines.



Delo 400 XLE SAE 10W-30 is formulated with ISOSYN Advanced Technology, which is a combination of Chevron's industry-leading formulating expertise with unique, high performance additive chemistry to help extend the durability of critical engine parts.

ISOSYN ADVANCED TECHNOLOGY

ISOSYN Advanced Technology is the combination of Chevron's outstanding formulating expertise, unique high performance additive chemistry and premium base oils that helps extend the durability of critical diesel engine parts.

Delo 400 products formulated with ISOSYN Advanced Technology can provide improved engine longevity, extended oil drain performance, and excellent diesel component parts protection, helping to extend vehicle life and minimize total cost of ownership when compared with previous generation Chevron HDMO formulations.

ISOSYN Advanced Technology benefits customers by helping to provide:

- Up to 35% improved oil oxidation control*
- Up to 68% improved wear protection*
- Up to 64% improved piston deposit control*

*Results will vary based on the Delo 400 product, operating conditions, and engine types. Always follow OEM recommendations and utilize used oil analysis testing when extending oil drain intervals.

FUNCTIONS

Delo 400 XLE SAE 10W-30 with ISOSYN Advanced Technology helps to keep rings clean and free for maximum combustion pressure and to provide minimal wear. It minimizes valve and piston crown land deposits, thus managing oil consumption. Its high level of ashless dispersants keeps fuel soot in suspension and thus helps to avoid 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. Its 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 ensures easy flow at low temperatures and excellent film protection in hot engine areas. A defoaming additive protects against air entrapment.

The combination of premium dispersant additives and ISOSYN Advanced Technology allows Delo 400 XLE SAE 10W-30 to effectively disperse soot and keep it in suspension. This minimizes the risk of valve train wear and filter plugging.

Applications

Delo 400 XLE SAE 10W-30 with ISOSYN Advanced Technology is a fuel economy and mixed fleet motor oil recommended for naturally aspirated and turbocharged four-stroke diesel engines and four-stroke gasoline engines in which the API CK-4, API SN or API SN PLUS service categories and SAE 10W-30 viscosity grade are recommended. It is formulated for engines operating under severe service and a wide range of climatic conditions.

Excellent performance in new advanced engines developed to meet the latest emissions and reliability standards and in engines equipped with features like four-valve heads, super-charging, turbo-charging, direct injection, higher power density, intercooling, full electronic management of fuel and emissions systems, exhaust selective catalytic reduction, exhaust gas recirculation, and exhaust particulate filters.

Delo 400 XLE SAE 10W-30 with ISOSYN Advanced Technology is formulated for exceptional performance with ultra low sulfur diesel (ULSD) and other low sulfur diesel fuels.

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.

This product is recommended for use in:

- Today's most modern on highway low emission designs as well as some older engines.
- Today's most modern off highway engines where an SAE 10W-30 viscosity grade is recommended including those adapted for the most stringent emissions standards in construction, agriculture, marine, and mining applications.
- Excellent performance in Auxiliary Power Units (APUs) found on trailer refrigeration (refer) units or on truck tractors to help reduce main engine idle.

Delo® 400 XLE SAE 10W-30 is approved for:

- **API Service Categories** CK-4, CJ-4, CI-4, CI-4 PLUS, CH-4, SN, SN PLUS
- **Cummins** CES 20086
- **Daimler MB-Approval** 228.31
- **Daimler MB-Approval** 228.51
- **Detroit Fluids Specification (DFS)** 93K222
- **DEUTZ** DQC III-10 LA
- **Mack** EOS 4.5
- **MTU** Category 2.1
- **Renault** VI RLD-3
- **Volvo** VDS-4.5

Delo® 400 XLE SAE 10W-30 is recommended for:

- **ACEA** E6/E9
- **Caterpillar** ECF-3
- **JASO** DH-2
- **MAN** M 3575

TYPICAL TEST DATA

| SAE Grade | 10W-30 |
|--|------------|
| Product Number | 257000 |
| SDS Number | |
| U.S. | 42039 |
| Canada | 42040 |
| Mexico | 42041 |
| Density at 15°C, kg/L | 0.868 |
| Viscosity, Kinematic mm ² /s at 40°C | 81 |
| mm ² /s at 100°C | 11.9 |
| Viscosity, Cold Crank, °C/mPa.s | -25/6300 |
| Viscosity, MRV, °C/mPa.s | -30/20,400 |
| Viscosity Index | 142 |
| Flash Point, °C(°F) | 234(453) |
| Pour Point, °C(°F) | -46(-51) |
| Sulfated Ash, mass % | 1.0 |
| Base Number, mgKOH/g, ASTM D2896 | 10 |
| Phosphorus, mass % | 0.080 |
| Sulfur, mass % | 0.3 |
| Zinc, mass % | 0.086 |

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

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