

# Delo 400 LE Synthetic SAE 5W-40

# Premium performance synthetic heavy-duty diesel engine oil

## Product description

Delo<sup>®</sup> 400 LE Synthetic SAE 5W-40 is a premium performance synthetic heavy-duty diesel engine oil designed for new low emission engines running on ultra-low sulphur diesel (ULSD) fuel.

Delo 400 LE Synthetic SAE 5W-40 is based upon ISOSYN<sup>®</sup> Technology and advanced low SAPS additives, offering engine and system protection for vehicles with Selective Catalytic Reduction (SCR), Diesel Particulate Filter (DPF) and Exhaust Gas Recirculation (EGR).

Delo 400 LE Synthetic SAE 5W-40 offers engine performance and protection across a wide range of applications including commercial road transport and many stop/start vehicles with a high soot loading potential, such as off-road trucks, buses and waste collection trucks.

## Customer benefits

- Formulated to offer high-level performance and protection in new low emission diesel engines using ultra-low sulphur diesel (ULSD)
- Designed with latest generation low SAPS technology, offering extended life and less cleaning interval downtime
- Offers good wear and corrosion deposit and soot control in cylinders, pistons, rings, and valve train components, increasing uptime
- Suitable for mixed fleets including modern low emission diesel engines, reducing inventory costs and product misapplication
- Low temperature oil flow properties offer rapid circulation, minimising engine wear during cold starts
- Shear stable viscosity modifier helps minimise viscosity change, allowing use over a wider range of operating temperatures



#### Product highlights

- Formulated for protection in latest ULSD diesel engines
- Designed with low SAPS technology
- Helps protect against wear, corrosion, deposits and soot
- Suitable for mixed fleets
- Promotes cold start wear protection
- Offers wide temperature operations

Selected specification standards include:

ACEA	API
Allison	Caterpillar
Cummins	DAF
Daimler	Detroit Diesel
Mack	MAN
MTU	Renault Trucks
Volvo	

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.

### Applications

- Delo 400 LE Synthetic SAE 5W-40 is an engine oil recommended for mixed fleets of naturally aspirated and turbocharged four-stroke diesel engines.
- It is suitable for commercial road transport including latest engines fitted with exhaust clean-up devices of most types. It is also suitable for vehicles in high soot loading stop/start situations, such as off-road trucks, buses and waste collection trucks.
- Delo 400 LE Synthetic SAE 5W-40 is specifically formulated for both old and new vehicles including vehicles meeting the most recent emissions standards including US EPA 2002 & 2007 and euro IV, V & VI.

# Approvals, performance and suitable for use

#### Approvals

- Allison TES 439
- Mack EO-O Premium PLUS
- Renault Trucks RLD-3
- Volvo VDS-4

#### Performance

- ACEA E7, E9
- API CJ-4 / CI-4 plus / CI-4 / CH-4 SM / SL / SJ
- Caterpillar ECF-3, ECF-2
- Cummins CES 20081
- DAF Standard drain (Euro 0 to VI)
- Daimler MB 228.31
- Detroit Diesel DFS 93K218, DFS 93K215
- Mack EO-M Plus, EO-M and EO-N
- MAN M3575
- MTU Oil Category 2.1
- Renault Trucks RLD-2, RLD
- Volvo VDS-3

#### Suitable for use

Suitable for use for in applications requiring:

- Renault Trucks RD-2, RD
- Volvo VDS-2, VDS

Typical test data		
Test	Test Methods	Results
Viscosity Grade		SAE 5W-40
Shelf Life: 60 months from date of filling indicated on the product label		
Density at 15°C, kg/l	ASTM D4052	0.859
Kinematic viscosity at 100°C, mm <sup>2</sup> /s	ASTM D445	14.6
Kinematic viscosity at 40°C, mm <sup>2</sup> /s	ASTM D445	91
Viscosity Index	ASTM D2270	166
Pour point, °C	ASTM D97	-45
Flash point COC, °C	ASTM D92	200 max
Total Base Number, mg KOH/g	ASTM D2896	10.5
Sulphated Ash, %wt	ASTM D874	1.0

The typical test data set out above does not constitute a specification. It is indicative only and can be affected by allowable production tolerances. Chevron may modify this test data. Modified data will supersede all previous data, so please ensure you refer to the latest version of this Product Data Sheet (PDS).

Disclaimer: Data provided in this Product Data Sheet (PDS) is based on standard tests under laboratory conditions and is indicative only. This product should not be used for any purpose other than those expressly set out in this PDS. The user has sole responsibility for verifying that this product is suitable for the user's intended application. Neither Chevron nor its subsidiaries (i) make any warranty or representation as to the accuracy or completeness of this PDS; and/or (ii) accept liability for any loss or damage suffered as a result of the use of this product other than in accordance with the terms of this PDS.

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When disposing of used product, take care to protect the environment and follow local legislation.

Safety Data Sheets (SDS's) are available for all Chevron products. If you require a SDS or any further information regarding a Chevron product, please contact your local sales office or see http://europe.chevronlubricants.com.

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