Delo® 400 XLE HD SAE 5W-30

Premium performance synthetic heavy-duty engine oil (Supersedes Ursa Ultra XLE SAE 5W-30)

Product description
Delo 400 XLE HD SAE 5W-30 is a premium performance synthetic heavy-duty engine oil. It is designed to deliver improved fuel economy and meets the performance requirements of a wide range of latest-generation naturally aspirated and turbocharged four-stroke low-emission diesel engines, legacy diesel power units and gas engines, as well as off-highway and construction service.

Delo 400 XLE HD SAE 5W-30 features ISOSYN® technology, a combination of premium base oils and additives, formulated to promote optimum diesel engine protection.

Delo 400 XLE HD SAE 5W-30 is designed with a viscosity index improver and advanced low SAPS additive technologies designed to deliver dependable keep-clean dispersancy and detergency performance, oxidation resistance, wear and corrosion protection with effective defoaming agents, in engines meeting Euro VI emissions requirements for Volvo, MAN, Scania, Daimler, DAF and Iveco engines.

Delo 400 XLE HD SAE 5W-30 ensures backwards compatibility with legacy engine technology by meeting both Full SAPS and Lower SAPS specifications where allowed by the OEM. Delo 400 XLE HD SAE 5W-30 is recommended where extended drain intervals are required, meeting ACEA E4, E6, E7 and E9 claims.

Customer benefits
• Designed to optimise fuel economy performance and maintain engine wear protection
• Developed for use in on-road, off-road and construction services, low emissions and older diesel engines, helping reduce inventory costs

Product highlights
• Wide range of on-road, off-road and construction applications
• Reduced inventory complexity and cost
• Low SAPS Euro VI technology
• Keep-clean engine protection
• Long DPF service life
• Extended drain intervals

Selected specification standards include:

<table>
<thead>
<tr>
<th>ACEA</th>
<th>API</th>
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<tbody>
<tr>
<td>Caterpillar</td>
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<tr>
<td>DAF</td>
<td>Detroit Diesel</td>
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<td>Deutz</td>
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<td>Mack</td>
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<td>Mercedes Benz</td>
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<td>Renault Trucks</td>
<td>Scania</td>
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<td>Volvo</td>
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</table>
• Low viscosity synthetic base oil formulation promotes reliable cold engine starts in sub-zero temperature conditions

• Helps keep piston rings, valves and piston lands clean, offers very good soot dispersancy and wear control, optimising engine service life

• Promotes low emissions performance and offers extended diesel particulate filter (DPF) life, helping reduce maintenance downtime

• Optimised additive technologies with synthetic base stocks help control oxidation, sludge and thickening, and extend oil drain intervals

Applications
• Delo 400 XLE HD SAE 5W-30 is a diesel engine lubricant recommended for four-stroke naturally aspirated and turbocharged diesel engines

• Delo 400 XLE HD SAE 5W-30 is recommended for diesel engines meeting Euro I-V and the newest Euro VI emissions requirements where allowed by the OEM and for use in engines with global after treatment systems. Delo 400 XLE HD SAE 5W-30 has a universal formulation recommended for both low SAPS (ACEA E6 and E9) and high SAPS performance (ACEA E7 and E4).

• Delo 400 XLE HD SAE 5W-30 is suitable for use in older engines as well as today’s latest low emission designs. It is formulated for high performance with many fuels including low sulphur and ultra-low sulphur diesel fuels, and many bio-fuel formulations. In high sulphur fuels it gives TAN and TBN control equivalent to a high SAPS product.

• Delo 400 XLE HD SAE 5W-30 is recommended for use in many gas engines and in off-highway or construction applications operating in conditions when SAE 5W-30 is recommended

Recommendations may differ between engine manufacturers, so driver manuals and/or dealers should be consulted if in doubt.

Approvals, performance and recommendations

Approvals
• Cummins CES 20081
• Detroit Diesel DDC93K218
• Deutz DQC IV-10 LA
• Mack EO-O Premium Plus
• MAN M3271-1, M3477, M3575, M3677
• Mercedes Benz MB-Approval 228.51, MB-Approval 228.31
• MTU Oil Category 3.1
• Renault Trucks RLD-3
• Scania LDF-4
• Volvo VDS-4

Performance
• ACEA E9, E6, E7, E4
• API CJ-4, CI-4 Plus, CI-4
• Caterpillar ECF-3
• Mack EO-N
• MTU Oil Category 2.1
• Renault Trucks RLD-2
• Scania Low Ash
• Volvo VDS-3

Recommendations
Suitable for use in:
• Applications requiring Renault Trucks RGD and RXD
• Applications requiring Renault Trucks RLD, RD-2, RD
• Applications requiring Volvo VDS-2
• Iveco Euro VI engines
• DAF Extended Drain (Euro IV, V MX engines and VI engines)
## Typical test data

<table>
<thead>
<tr>
<th>Test</th>
<th>Test Methods</th>
<th>Results</th>
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</thead>
<tbody>
<tr>
<td><strong>Viscosity Grade</strong></td>
<td></td>
<td>SAE 5W-30</td>
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<tr>
<td><strong>Shelf Life: 60 months from date of filling indicated on the product label</strong></td>
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<tr>
<td>Density, 15 °C, kg/l</td>
<td>ASTM D4052</td>
<td>0.855</td>
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<tr>
<td>Viscosity, Kinematic at 40 °C, mm²/s</td>
<td>ASTM D445</td>
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<td>Viscosity, Kinematic at 100 °C, mm²/s</td>
<td>ASTM D445</td>
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<td>Viscosity Index</td>
<td>ASTM D2270</td>
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<tr>
<td>Pour Point, °C</td>
<td>ASTM D5950</td>
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<tr>
<td>Flash Point COC, °C</td>
<td>ASTM D92</td>
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<tr>
<td>Total Base Number, mg KOH/g</td>
<td>ASTM D2896</td>
<td>12.9</td>
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<tr>
<td>Sulphated Ash, %wt</td>
<td>ASTM D874</td>
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The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.