



Delo 400 XSP-SD SAE 5W-30

High performance synthetic heavy-duty diesel engine oil

Product description

Delo® 400 XSP-SD SAE 5W-30 is a high performance synthetic heavy duty engine oil designed for fuel economy and meets the performance requirements of a wide range of naturally aspirated and turbocharged diesel engines in on-highway, off-highway and construction service.

Delo 400 XSP-SD SAE 5W-30 is based on ISOSYN® technology with low SAPS performance and dispersant, detergent, oxidation, anti-wear, corrosion, viscosity improver and de-foaming additives and meets Euro VI emissions requirements, while offering extended drain intervals.

Customer benefits

- Designed for improved fuel economy performance while helping maintain robust component wear protection and engine service life
- Formulated for good performance in a wide range of engines, and helps reduce inventories, costs, and the risk of misapplication
- Low viscosity synthetic base oils offer rapid circulation in cold and sub-zero engine start-ups
- Extended drain formulation combines synthetic base stocks and additives to promote wear, oxidation, sludge and thickening control
- Offers reliable Diesel Particulate Filter (DPF) clogging protection and helps reduce cleaning while improving DPF service life



Product highlights

- **Designed for fuel economy and engine service life**
- **Helps reduce inventories and misapplication**
- **Offers protection in sub-zero engine starts**
- **Extended drain formulation**
- **Promotes DPF protection and service life**

Selected specification standards include:

ACEA	AGCO Power
API	Caterpillar
Cummins	Daimler Trucks
DAF	Deutz
Detroit Diesel	JASO
Ford	Mercedes Benz
Mack	Renault Trucks
MTU	Volvo
Scania	

Applications

- Delo 400 XSP-SD SAE 5W-30 is a high performance engine oil recommended for four-stroke naturally aspirated and turbocharged diesel engines.
- Delo 400 XSP-SD SAE 5W-30 is recommended for diesel engines meeting Euro I - Euro V and the latest Euro VI emissions requirements where allowed by the OEMs and is suitable for use in engines with global after treatment systems.
- Delo 400 XSP-SD SAE 5W-30 is recommended for use in older engines as well as today's most modern low emission designs. It is formulated for high performance with many fuels including low sulphur and ultra-low sulphur diesel fuels, and many biofuel formulations.

Approvals, performance and suitable for use

Approvals

- Cummins CES 20086
- DAF PSQL 2.4 LD*
- Daimler Truck DTFR 15C110 (previously MB 228.51)
DTFR 15C120 (previously MB 228.52)
- Detroit Diesel DFS 93K222
- Deutz DQC IV-18 LA
DQC TTCD[°]
- Mack EOS-4.5
- MAN M3677
M3691
- MTU Oil Category 3.1
- Renault Trucks RLD-3
- Scania LDF-4
- Volvo VDS-4.5

[°] Product approved for DQC IV-18 LA are also approved for use in Deutz TTCD engines

Performance

- ACEA E6, E7, E8, E9, E11
- API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4 SN, SM, SL, SJ
- JASO DH-2
- AGCO Power LOCC-G2, LOCC-G3
- Caterpillar ECF-3
- DAF Extended drain (Euro IV to VI)**
- Ford WSS-M2C213-A1
- Mack EO-O Premium Plus, EO-N, EO-M Plus, EO-M
- MAN M3477***, M3271-1***
- Mercedes Benz MB 228.31
- Renault Trucks RLD-2, RLD, RXD, RGD
- Volvo VDS-4, VDS-3
- Scania Low Ash

* Defined in DAF MAT 70026

** can be used in Euro IV & Euro V MX engines and in Euro VI MX & PX engines for DAF

*** these product claims are obsolete by MAN and no approvals can be obtained; applications that require these claims can be fulfilled by MAN M3677 approved products

Suitable for use

Delo 400 XSP-SD SAE 5W-30 is suitable for use in applications requiring:

- Iveco 18-1804 TLS E6[^]
- Liebherr LH-00-ENG LA
- Renault Trucks RD-2, RD
- Volvo VDS-2, VDS

Suitable for use in tractors and other agricultural machinery from the following manufacturers, which require an engine oil meeting the specifications listed above:

- Case New-Holland
- CLAAS
- Fendt
- Massey-Ferguson
- Mc Cormick
- SAME
- Valtra

[^] check equipment/vehicle manual to ensure that the drain interval of oil is aligned with S content in the fuel used in the engine

Typical test data		
Test	Test Methods	Results
Viscosity Grade		5W-30
Shelf Life: 60 months from date of filling indicated on the product label		
Density at 15°C, kg/l	ASTM D4052	0.858
Kinematic viscosity at 40°C, mm ² /s	ASTM D445	73
Kinematic viscosity at 100°C, mm ² /s	ASTM D445	12.2
Viscosity Index	ASTM D2270	164
Pour point, °C	ASTM D97	-42
Flash point COC, °C	ASTM D92	231
Total Base Number, mg KOH/g	ASTM D2896	10
Sulphated Ash, %wt	ASTM D874	0.9

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.

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 www.texacolubricants.com.

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.

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MAN Truck & Bus SE Postfach 44 02 58 90207 Nürnberg

Abt/Kürzel	E-Mail	Nürnberg
BST-TEAM	bstinfo@man.eu	10.07.2024

Subject: **Prolongation letter TUC 1802/21**
MAN standard: **M 3677**
M 3691
Start of approval: 05.07.2021
End of approval: 04.07.2027
Validity:

Dear Sir or Madam,

we are pleased to inform you that the following product has been prolonged under MAN TUC 1802/21 .

Delo 400 XSP-SD 5W-30
SAE 5W-30

This prolongation is only available for the unchanged formulation and in combination with the original approval letter. The approval will automatically expire at the point of time indicated above. A prolongation has to be applied within the approval period.

Yours faithfully,

MAN Truck & Bus SE

This letter was created electronically without signature.

MANDCS2000 BSD_SF_PROLONG_Vers. 2.0

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Vorstand: Alexander Vlaskamp (Vorsitzender)
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Ein Unternehmen der MAN Gruppe - www.mantruckandbus.com



Delo 600 ADF SAE 15W-40

Premium performance ultra low ash long-drain engine oil

Product description

Delo® 600 ADF SAE 15W-40 with OMNIMAX™ is a premium performance ultra low ash long-drain engine oil, designed to deliver effective protection to both the engine and emissions system across mixed fleets.

Delo 600 ADF SAE 15W-40 offers extended diesel particulate filter (DPF) service intervals and helps improve fuel economy through reducing DPF regeneration and ash build-up. This product meets latest standards including Euro VI and off-highway EU Stage V.

Customer benefits

- Low ash design reduces DPF clogging, helping reduce DPF maintenance, equipment downtime and maintenance costs.
- Low metallic ash formulation promotes reduced DPF regeneration and back pressure, helping improve fuel economy.
- Premium detergent and dispersant additives contribute to dependable component protection and increased uptime.
- Ashless dispersants help prevent oil filter clogging, sludge, abrasive polishing, valve train wear and oil viscosity increases.
- Designed for long oil drain protection in on and off-highway diesel engines, helping optimise productivity.
- Specifically formulated to offer both good engine wear resistance and effective DPF protection, helping reduce downtime.

Product highlights

- **Designed for reduced DPF clogging and maintenance**
- **Formulated for good engine protection**
- **Promotes improved fuel economy performance**
- **Helps resist oil filter clogging, sludge and wear**
- **Aids long oil drain service**
- **Offers effective engine and DPF protection**

Selected specification standards include:

ACEA	API
Case New-Holland	CLAAS
Cummins	Daimler Trucks
DEUTZ	Detroit Diesel
Fendt	Mack
Massey-Ferguson	McCormick
Renault	SAME
Valtra	Volvo

Applications

- Delo 600 ADF SAE 15W-40 is an API CK-4 and ACEA E6, E9 & E11 heavy-duty engine oil specifically formulated for on-highway applications and low emission diesel engines with selective catalytic reduction (SCR), diesel particulate filters (DPF) and exhaust gas recirculation (EGR) systems calling for a 15W-40 premium heavy-duty motor oil.
- Delo 600 ADF SAE 15W-40 with low ash additive technology is also recommended for off-highway engines where a 15W-40 viscosity grade is required.
- Delo 600 ADF SAE 15W-40 is fully compatible with previous engine models and previous API Oil Service Categories.

Approvals, performance and suitable for use

Approvals

• Cummins	CES 20086, CES 20092
• Daimler Truck	DTFR 15C100 (previously known as MB 228.31)
• Deutz	DQC III-18 LA
• Detroit Diesel	DFS 93K222
• Mack	EOS-4.5
• MAN	M3775
• Renault	RLD-3
• Volvo	VDS-4.5
• ZF	TE-ML 04C

Performance

• ACEA	E6, E9, E11
• API	CK-4, CJ-4, CI-4 Plus, CI-4, CH-4
• Caterpillar	ECF-3
• Mack	EO-O Premium Plus, EO-N, EO-M Plus, EO-M
• MTU	Oil Category 3.1
• Renault	RLD-2, RLD
• Volvo	VDS-4, VDS-3

Suitable for use

Suitable for use in tractors and other agricultural machinery from the following manufacturers, which require an engine oil meeting the specifications listed above:

- Case New-Holland
- CLAAS
- Fendt
- Massey–Ferguson
- McCormick
- SAME
- Valtra

Typical test data		
Test	Test Methods	Results
Viscosity Grade		15W-40
Shelf Life: 60 months from date of filling indicated on the product label		
Density, 15 °C, kg/l	ASTM 4052	0.869
Viscosity, Kinematic at 40 °C, mm ² /s	ASTM D445	111.5
Viscosity, Kinematic at 100 °C, mm ² /s	ASTM D445	14.9
Viscosity Index	ASTM D2270	136
Pour Point, °C	ASTM D97	-30
Flash Point COC, °C	ASTM D92	248
Total Base Number, mg KOH/g	ASTM D2896	6.5
Sulphated Ash, %wt	ASTM D874	0.4

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

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December 27, 2025

CUMMINS FLUID SPECIFICATION CONFORMANCE AGREEMENT

This Agreement (“Agreement”) is entered into by and between Chevron Products Company, a Division of Chevron U.S.A. Inc. (“Registrant”), and Cummins Inc, an Indiana corporation (“Cummins”) effective as of the date above. Each of Registrant and Cummins is referred to individually as a “Party” and collectively as the “Parties.”

WHEREAS Registrant has submitted a fluid sample Delo 600 ADF 15W-40 with Cummins Audit number A100028 (“Sample”) containing a certain chemical formulation (“Formula”) and associated payment paid by due date (per Invoicing Terms) to Cummins, to have the fluid tested that such fluid meets Cummins Engineering Standard 20086 (“Standard”), a copy of which is available upon request, and

WHEREAS Cummins has conducted testing on the Sample in accordance with the Standard.

On the basis of the forgoing, Cummins hereby confirms the Sample meets the Standard and grants Registrant the non-exclusive right to utilize the Statement in marketing, advertising, promotional and other similar materials and communications in compliance with the terms set forth herein subject to the further terms hereof:

1. TERM

This Agreement shall be effective upon signature of the Registrant, as of the date of preparation of this Agreement, printed above, and shall continue for one (1) year (“Term”), unless earlier terminated by either party in accordance with Section 7 below or as otherwise provided herein.

2. PRODUCT LABELING

2.1. Where the Formula is reproduced and sold as a commercial product (“Product”), Registrant may include on Product packaging the following statement: “This product meets Cummins® Eng. Std. 20086” or similar statement mutually agreed to in writing by the Parties (“Statement”).

2.2. Registrant may not modify this Statement.

2.3. Registrant will use reasonable efforts to display the Statement on the Products as permitted under this Agreement in an informational fashion. Statement must be placed on the back on Product packaging and in a font and color consistent with other product information as stated by Registrant on the package, container, or over pack box. Such display should not be prominent so as to create the appearance that the source of the Product is Cummins.

2.4. Registrant acknowledges and agrees that Cummins own all rights in the brand, logos, graphics, tradenames, trade dress, service marks and trademarks, registered or

ENGINE OIL for Cummins Engines—June 2017

General Information

Oil technology advances due to requirements from engine technology (example: hotter combustion temperatures) or regulatory requirements (example: emissions regulations). There are multiple groups globally that provide standards for oil classifications. Among them are the following.

- American Petroleum Institute (API)
- **Association des Constructeurs Européens d'Automobiles (ACEA)**
- Japanese Automobile Manufacturers Association (JAMA)

The API oil category, or any international oil certification, is **not** sufficient by itself to select the appropriate engine oil for a Cummins® engine. Oils should be selected that meet the appropriate Cummins® Engineering Standard (CES). Table 1 below does provide a comparison between CES and other oil regulatory classifications for reference **only**.

Note : The CES number should not be considered to be sequential or supersede previous CES numbers unless specifically stated. Higher CES numbers do not necessarily indicate the oil is better than lower CES numbers.

The API requires a set of lab and engine tests that each commercial oil candidate **must** pass in order to meet the requirements for technology advances. API oil categories define the tests and properties required for a specific oil technology. Examples are below.

- CI-4 category oils were released in 2002 and updated in 2004, coinciding with exhaust gas recirculation technology, to improve soot control and shear stability.
- CJ-4 category oils were released in 2007, coinciding with emissions regulations and ultra low sulfur diesel fuel, to improve compatibility with aftertreatment, wear control, piston deposits, high temperature stability, and soot handling.
- CK-4 oils were released in December 2016 with all the typical viscosity grades of CJ-4 oils. As higher engine temperatures and lower emissions are a continuing trend, improved oils were required. CK-4 has improved oxidation resistance, shear stability, and aeration control. API category CK-4 is backward compatible with API category CJ-4 oil technology.
 - FA-4 oils were released in December 2016, primarily as a 10W-30 viscosity grade. FA-4 oils carry the same improved oxidation resistance, shear stability, and aeration control of CK-4 oils. FA-4 oils also reduce greenhouse gas emissions (increased fuel economy, dependent on duty cycle) by lowering high temperature/high shear (HTHS) viscosity. This lower HTHS results in directionally thinner oil films lubricating metal-metal interfaces. API category **FA-4 oils are not backward**

compatible and should only be used when directed by the Lubricating Oil Recommendations and Specifications procedure in Section V of corresponding owners/operation and maintenance manual to use CES 20087 engine oils.

- Other global regulatory groups such as the ACEA and JAMA may require additional or different tests.

Table 1: CES Comparison to Other Oil Regulatory Classifications

CES	Closest API Category	Closest International Classification
Not Approved	CG-4	ACEA E1
CES 14615	None	None
CES 20074	None	None
CES 20075	CF-4	ACEA E2 ACEA E3
CES 20071 CES 20076 CES 20077	CH-4	ACEA E5 JAMA DH-1
CES 20078 CES20088	CI-4	ACEA E7
CES 20081	CJ-4	ACEA E9 JAMA DH-2
CES 20085	None	None
CES 20086	CK-4	None
CES 20087	FA-4	None

Last Modified: 28-Jun-2017

378-004 Determining Proper Engine Oil for Cummins® Engines

General Information

Oils are formulated specifically for different engine technologies. Factors such as fuel type and aftertreatment will influence the type of oil that should be utilized in your engine.

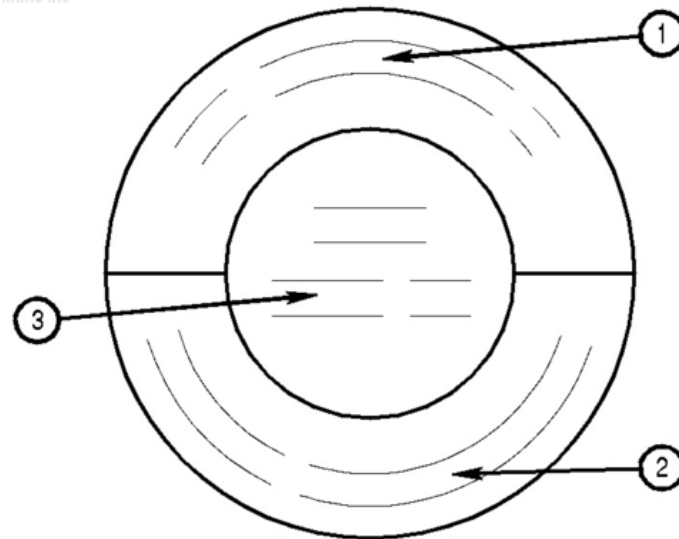
It is critical to make sure the oil being utilized in your Cummins® engine meets the performance requirements set by Cummins Inc. To be sure the proper oil is being utilized for your engine, perform the following steps:

1. Identify the appropriate Cummins Engineering Standard (CES) for your engine. See the Owners/Operation and Maintenance Manual, Section V - Maintenance Specifications, and locate the approved CES in procedure 018-003 - Lubricating Oil Recommendations and Specifications. Or for general recommendations, see the following procedures in this manual.
 - a. Use the following procedure for diesel engines. [Refer to Procedure 378-005 in Section 4.](#)
 - b. Use the following procedure for gas engines. [Refer to Procedure 378-006 in Section 4.](#)
2. Identify the appropriate viscosity grade for your engine. See the Owners/Operation and Maintenance Manual, Section V - Maintenance Specifications, and locate the approved viscosity grade in procedure 018-003 - Lubricating Oil Recommendations and Specifications.
3. Identify an oil that meets the correct CES and viscosity grade for your engine. A list of oils that meet the appropriate CES for your engine can be obtained from your local Cummins® distributor or can be found on QuickServe Online at:
 - o https://quickserve.cummins.com/qs3/qsol/service/serviceproducts/oil_registration.html

Do **not** use an oil that is **not** registered with the appropriate CES in a Cummins® engine.

Engine oil packaging should contain information on the viscosity grade and CES certification. The CES should be clearly marked with **other manufacturer's certifications**. For American Petroleum Institute (API)-approved oils, for example, viscosity grade information can be found in a round service symbol called a “donut”. See Figure 1.

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Figure 1: API “Donut” Found on Commercial Oil Containers

1. The upper half of the symbol carries the API oil category (e.g. CK-4) **The “C” stands for commercial, but implies use in diesel or natural gas engines. The “K” represents the category as it increases through time.** The new fuel economy category (e.g. FA-4) will **replace the “C” with an “F”.**
2. The lower half describes whether the oil has demonstrated energy-conserving or fuel economy properties compared to a reference oil.
3. The center provides the oil viscosity (e.g. 15W-40).

General Information

Many factors affect the type of engine oil that **must** be utilized for an engine, such as the use of aftertreatment, exhaust gas recirculation (EGR), and fuel quality.

Multiple oil categories can be allowed for the same diesel engine, however shortened oil drain intervals can be required. Diesel engines equipped with aftertreatment systems require oils with lower sulfated ash content.

Global fuel quality plays a significant role in selecting the appropriate oil. For locations with fuel sulfur > 15 ppm and **not** using aftertreatment, do **not** use oil meeting Cummins® Engineering Standard (CES) 20081, CES 20086, CES 20087, as the starting total base number (TBN) is typically lower and may require reduced oil drain intervals. For fuel sulfur > 15 ppm CES 20078 is recommended.

Requirements

Utilize Table 1 to determine what CES approved oil to use for diesel engines.

[Refer to Procedure 378-003 in Section 4](#) for a list of the closest American Petroleum Institute (API) and International oil classification.

Note : CES 20086 is recommended for use anywhere CES 20081 was previously recommended. CES 20086 oil can be used in any diesel engines that are running on ULSD fuel.

Global CES Oil Recommendation Based on Engine/Aftertreatment Configuration			
CES	Without EGR, Without Aftertreatment	With EGR, Without Aftertreatment	With Aftertreatment
CES 20075	Not permitted	Not permitted	Not permitted
CES 20071 CES 20076 CES 20077	Permitted	Reduced Oil Drain Interval	Not permitted
CES 20078	Recommended	Recommended	Permitted for some engines ^{2,3}
CES 20081	Permitted¹	Permitted ¹	Permitted ¹
CES 20086	Recommended¹	Recommended ¹	Recommended ¹
CES 20087	Not Permitted	Not Permitted	Permitted for some engines ^{1,2}
CES 20088	Permitted for some engines ²	Permitted for some engines ²	Permitted for some engines ^{2,3}
<ol style="list-style-type: none"> 1. Ultra-Low Sulfur Diesel (ULSD) is required. 2. Reference Procedure 018-003 (Lubricating Oil Recommendations and Specifications) in the Owners/Operation and Maintenance Manual for further information on engines approved to this CES standard. 3. CES 20078 and CES 20088 are not permitted on engines using diesel particulate filter (DPF) aftertreatment. 			

NOTE: Maine Engine DO NOT have Aftertreatment or an EGR