

# Engine oils

ADDINOL Engine oils	SAE	ACEA	API	International specifications and approvals
Professional 0530 E6/E9	5W-30	E6/E7/E9	CJ-4, SN	Mack EO-0 Premium Plus, MAN M 3677, MAN M 3477, MAN M 3271-1, MB-Approval 228.51/228.31, Renault RLD-3, Volvo VDS-3/-4, Scania LDF-4, fulfils: MTU Type 3.1, Volvo CNG, Renault RGD/RXD/RLD/RLD-2, Deutz DQC IV-10 LA, Mack EO-M Plus/EO-N Premium Plus, Caterpillar ECF-3, Detroit Diesel DDC 93K218, Cummins CES 20081, Scania Low Ash, MB-Approval 235.28, Voith Retarder Class B, Fiat-Iveco, DAF, JASO DH-2
Ultra Truck MD 0538	5W-30	E4/E7	CI-4	MAN M 3277, MTU Type 3, MB-Approval 228.5, fulfils: DAF, Deutz DQC IV-10, Cummins CES 20078/76, Caterpillar ECF-2, Renault RXD/RLD-2, MAN M 3377, Volvo VDS-3, Scania LDF, Mack EO-N/EO-M Plus, JASO DH-1, Global DHD-1
Commercial 0540 E7	5W-40	E7/E5/E3	CI-4 Plus/SL	fulfils: MB-Approval 228.3, MAN M 3275-1, Volvo VDS-3, Renault RLD/RLD-2, MTU Type 2, Mack EO-N/EO-M Plus, Cummins CES 20077/76, Caterpillar ECF-2/ECF-1a
Commercial 1030 E7	10W-30	E7/E5/E3	CI-4/SL	fulfils: MB-Approval 228.3, MAN M 3275-1, Volvo VDS-3, MTU Type 2, Renault RLD/RLD-2, Deutz DQC III-10, Mack EO-N/EO-M Plus, Cummins 20071/72/76/77/78, DAF, Caterpillar ECF-2/ECF-1a
Professional 1030 CK-4	10W-30	E7/E9	CK-4	Volvo VDS 4.5, Mack EOS-4.5, Renault RLD-3, fulfil: MB-Approval 228.31, MTU Type 2.1, Deutz DQC III-10 LA, MAN M 3575, MAN M 3275-1, Caterpillar ECF-3/-2/-1a, Cummins CES 20086, Detroit Diesel DDC 93K222, JASO DH-2
Professional 1540 CK-4	15W-40		CK-4/SN	
Super Longlife MD 1047	10W-40	E7/B4/A3	CI-4/SL	MB-Approval 228.3/229.1, MAN M 3275-1, Volvo VDS-3, MTU Type 2, Deutz DQC III-10, Renault RLD-2, Mack EO-N/EO-M Plus, fulfils: Caterpillar ECF-2, Cummins CES 20078/77/76, DAF, Fiat-Iveco, Global DHD-1
Super Truck MD 1049	10W-40	E4/E7	CF	MB-Approval 228.5, MAN M 3277, Scania LDF-3, Volvo VDS-3, MTU Type 3, Renault RLD-2, Deutz DQC III-10, Mack EO-N, fulfils: DAF, Renault RXD
Extra Truck MD 1049 LE	10W-40	E6/E7	CI-4	MB-Approval 228.51, MAN M 3477, MAN M 3271-1, Renault RLD-2, Deutz DQC IV-10 LA, MTU Type 3.1, Volvo VDS-3, Mack EO-N, fulfils: DAF HP 2, MB-Approval 226.9, Renault RGD/RXD, Volvo CNG, Caterpillar ECF-1a, Fiat Iveco, JASO DH-2
Professional 1040 E9	10W-40	E9/E7	CJ-4/SM	MB-Approval 228.31, MAN M 3575, Volvo VDS-4, Renault RLD-3, Mack EO-0 Premium Plus, Cummins CES 20081, fulfils: MTU Type 2.1, Deutz DQC III-10 LA, DAF, Caterpillar ECF-3/-2/-1a, Detroit Diesel DDC 93K218, 10W-40: Iveco (ACEA E9), 15W-40: Iveco (ACEA E7)
Professional 1540 E9	15W-40			
Commercial 1040 E4	10W-40	E4/E7	CI-4	MAN M 3277, MAN M 3377, MB-Approval 228.5, MTU Type 3, fulfils: Volvo VDS-3, Renault RXD, Deutz DQC III-10, DAF, Mack EO-M Plus, Cummins CES 20078, Caterpillar ECF-1a, Global DHD-1
Diesel Longlife MD 1548	15W-40	E7	CI-4 Plus/SL	MB-Approval 228.3, MAN M 3275-1, Volvo VDS-3, MTU Type 2, Renault RLD-2, Mack EO-N/EO-M Plus, Deutz DQC III-10, Cummins CES 20078/77/76, fulfils: Caterpillar ECF-2/ECF-1a, Detroit Diesel DDC 93K215, Fiat-Iveco, DAF, Global DHD-1
Diesel Longlife MD 2058	20W-50	E7	CH-4/SJ	fulfils: MB-Approval 228.3, MAN M 3275-1, Caterpillar ECF-1
Premium Star MX 1048	10W-40	E7/B4/A3	CI-4/SL	MB-Approval 228.3/229.1, MAN M 3275-1 (running), fulfils: Volvo VDS-3, Renault RLD-2, Caterpillar ECF-2, Mack EO-N/EO-M Plus, Deutz DQC III-10, MTU Type 2, Cummins CES 20078/77/76, Fiat-Iveco, DAF
Super Star MX 1547	15W-40	B4/A3	CF/SL	fulfils: MB-Approval 228.3/229.1, VW 501 01/505 00, PSA B71 2295
Super Star MX 2057	20W-50	E2	CG-4/SL	fulfils: MB-Approval 228.1, MAN 271
Gasmotorenöl MG 1040	10W-40	E3	CG-4	meet in operations with CNG: MAN M 3271-1, MB-Approval 226.9, Renault RGD, Volvo CNG, in operations with diesel: MAN M 3275-1, MB-Approval 228.1
Gasmotorenöl MG 1540	15W-40			
Gasmotorenöl MG 2050	20W-50			
Eco Cargo 1049 LE	10W-40	E6/E7	CI-4	fulfils: MB-Approval 228.51/226.9, MAN M 3477, MAN M 3271-1, Renault RLD-2, MTU Type 3.1, Deutz DQC IV-10 LA, Volvo VDS-3, Mack EO-N, Caterpillar ECF-1-a, DAF HP 2, Fiat-Iveco, Renault RGD, RXD, Volvo CNG, JASO DH-2
Eco Cargo 1540	15W-40	E7	CI-4 Plus/SL	fulfils: MB-Approval 228.3, MAN M 3275-1, Volvo VDS-3, Renault RLD-2, Mack EO-N/EO-M Plus, MTU Type 2, Deutz DQC III-10, Cummins CES 20076/77/78, Caterpillar ECF-2/ECF-1a, DDC 93K215, Fiat-Iveco, DAF, Global DHD-1

# Transmission oils and ATF

ADDINOL Transmission oils	SAE	API	International specifications and approvals
GS 75 W 80 SL	75W-80	API GL-4	MAN 341 Z4, ZF TE ML 01L, 02L, 16K, fulfils: MAN 341 E3, EATON Europe, Volvo 97307, Bosch (ZF) TE-ML 08, DAF, Iveco, Renault, ZF TE-ML 13, 24A
GS 75 W 90	75W-90	API GL-4	fulfils: Bosch (ZF) TE-ML 08, MIL-L-2105
GS 80 W	80W	API GL-4	MB-Approval 235.1, ZF TE-ML 17A, fulfils: Bosch (ZF) TE-ML 08, MAN 341 Z2/E1, MIL-L-2105
GS 80 W 90	80W-90	API GL-4	ZF TE-ML 16A, 17A, 19A, fulfils: Bosch (ZF) TE-ML 08, Iveco 18-1807 (MG), MIL-L-2105
GS 85 W 90	85W-90	API GL-4	fulfils: MIL-L-2105
GS 85 W 140	85W-140	API GL-4	fulfils: MIL-L-2105
GX 80 W 90	80W-90	API GL-4/L-5	ZF TE-ML 05A, 12 E, 16B, 17B, 19B, 21A, fulfils: MAN 341 M1/M2, Volvo 1273,10 (97310), ZF TE-ML 07A, Bosch (ZF) TE-ML 08, MIL-L-2105 D, Nato 0-226
GX 80 W 90 ML	80W-90	API GL-4/GL-5, MT-1	MAN 341 Z2, MAN 342 M2, ZF TE-ML 02B, 05A, 12L, 12M, 16B, 17H, 19B, 21A, fulfils: SAE J2360, Bosch (ZF) TE-ML 08, MAN 341 E2/Z1, MB-Approval 235.0, Scania STO 1:0, ZF TE-ML 07A, MIL-L-2105/2105 D, MIL-PRF 2105 E
GH 75 W 90	75W-90	API GL-4/GL-5	fulfils: Bosch (ZF) TE-ML 08, VW 050 145, 050 150 (G 50), Volvo 97316 (G0101), ZF TE-ML 07A, MIL-L-2105 D
GH 75 W 90 SL	75W-90	API GL-5, MT-1	MB-Approval 235.8, MAN 341 Z2, MAN 342 S1, ZF TE-ML 02B, 05A, 12L, 12N, 16F, 17B, 19C, 21A, fulfils: SAE J2360, Volvo 97312, DAF, Iveco, Renault, ZF TE-ML 07A, Bosch (ZF) TE-ML 08, Scania STO 1:0/2:0./2:0 A FS, Mack GO-J, MIL-L-2105 D
GH 80 W 90	80W-90	API GL-5	Voith Turbo 132.00374400, ZF TE-ML 16B, 17B, 19B, 21A, fulfils: Bosch (ZF) TE-ML 08, ZF TE-ML 07A, MIL-L-2105 D
GH 85 W 90	85W-90	API GL-5	Voith Turbo 132.00374400, ZF TE-ML 16C, 17B, 19B, 21A, MAN 342 M1, fulfils: Bosch (ZF) TE-ML 08, ZF TE-ML 07A, MB-Approval 235.0, MIL-L-2105 D
GH 80 W 140	80W-140	API GL-5	fulfils: Bosch (ZF) TE-ML 08, ZF TE-ML 07A, MIL-L-2105 D
GH 85 W 140	85W-140	API GL-5	ZF TE-ML 05A, 12E, 16D, 21A, fulfils: Bosch (ZF) TE-ML 08, ZF TE-ML 07A, MIL-L-2105 D
GH 80 W 90 LS	80W-90	API GL-5	ZF TE-ML 05C, 12C, 21C, fulfils: MAN 342 M1, Volvo 97310/97314, DAF, MB-Approval 235.0, ZF TE-ML 07A, MIL-L-2105 D
GH 85 W 90 LS	85W-90	API GL-5	ZF TE-ML 05C, 12C, 16E, 21C, fulfils: MAN 342 M1, Volvo 97310/97314, DAF, MB-Approval 235.0, ZF TE-ML 07A, MIL-L-2105 D

ADDINOL ATF	Type	International specifications
ATF XN 2	Dexron II D	fulfils: Allison C4/C3, Caterpillar TO-2, MAN 339 Z1/V1/L2, MB-Approval 236.1/6/7, ZF TE-ML 04D/14A/17C, Renk DOROMAT, Ford SQM-9010B/ M2C-138 CJ/ M2C-166H/ M2C-185A
ATF XN 3	Dexron III (H)	fulfils: Allison C4, Caterpillar TO-2, MAN 339 Z1/V1/L1, MB-Approval 236.1/5, ZF TE-ML 04D/14A, Voith H55.6335.xx, Mercon M, Mopar +3, Volvo 97340
ATF XN 5	Dexron III (H)	fulfils: Mercon V, VW G 052 162/ G 055 025/ LT 71141, Besco 3, Mazda M-V, JWS 3309-3317, PSA AL-4, Hyundai/Kia/Mitsubishi SP-III, Ford FNR5/XT-5, Nissan Matic C/D/J, Subaru 5 ATF, Toyota T-III, Honda ATF-Z1, MB-Approval 236.6/11, Mopar ATF +4, ZF TE-ML 04D/11B/14B/16L, Volvo 97341
ATF XN HD		fulfils: MAN 339 Typ Z3/Z12/V2, MB-Approval 236.9, Voith 150.014524, Volvo 97341, ZF TE-ML 14C/20C
ATF DCT	DCT	fulfils: VW/Audi G 052 182/G 052 529/G 055 529, BMW DCTF-1, BMW Drivelogic 7/ MTF LT-5, JAC DTF630, MB-Approval 236.21/24/25, MG DCT 360/DQ 350, Ford/Nissan M2C 936-A/200-D2/TC-SST 6, PSA DCS 6, Renault EDC-6/7

**ADDINOL**  
THE ART OF OIL · SINCE 1936

➤ ADDINOL Engine and Transmission Oils For Motor Trucks



Including new ATF XN series

MORE THAN  
**80**  
YEARS

GERMAN  
QUALITY

► **How to choose the right engine oil – fast, simple, safe**

Decisive for the selection are the operating instructions of your vehicle.

Under the point “engine oil” the manufacturers lay down which oil is allowed to be used. Here they give details on:

- viscosity and/or SAE-grade
- approvals
- specifications.

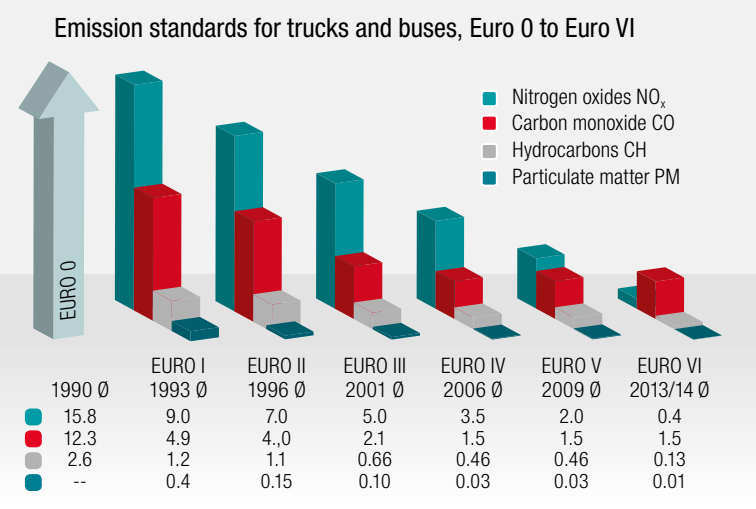
MAN, Mercedes-Benz, MTU, Renault, Fiat-Iveco, Mack, Scania, Volvo and VW have their own approvals for engine oils. Other manufacturers use only international specifications like ACEA and API. The approvals and specifications have different combinations of numbers and/or letters. These combinations indicate the oil type. Thus the respective details are given on all ADDINOL packages and in this flyer.

**The combinations of numbers and letters are easy to understand**

**Viscosity** – it describes the flow behaviour of the oil and depends on the temperature. Engine and transmission oils are classified into SAE-grades (Society of Automotive Engineers). Modern multi-grade oils like ADDINOL Extra Truck MD 1049 LE or ADDINOL Professional 0530 E6/E9 are all-season oils. They lubricate reliably at all temperatures.

**ACEA** – is the name of the association of European engine manufacturers (Association des Constructeurs Européens d'Automobiles). It draws up specifications for engine oils which are based on strict European testing methods. Thus the specifications of ACEA describe the requirements on engine oils shared by the European vehicle manufacturers. Specifications for diesel engines of commercial vehicles are summed up in category ACEA E, the highest specifications for vehicles with exhaust treatment at the moment being ACEA E6 and ACEA E9 with ACEA E9 taking into consideration the requirements of American manufacturers for the first time.

**API** – the specifications of the American Petroleum Institute are based mainly on tests with engines of American manufacturers. For commercial vehicles classifications marked with API C (C = Commercial) are relevant. Current specifications range from API CH-4 to API CK-4, API CA to API CG-4 are valid for vehicles constructed before 1998. API CK-4 describes the highest requirements on diesel engine oils at the moment.



**EXHAUST EMISSIONS**

In the last years, new emission standards for heavy commercial vehicles and mobile machinery came into effect in Europe and the United States step by step. In order to achieve these increasingly strict standards vehicle manufacturers employ modern engine technologies and exhaust treatment systems. Such systems require engine oils with a low content of ash-forming substances, so-called Low and Mid SAPS oils. Naturally, these complex requirements are reflected in the specifications of vehicle manufacturers.

If engine oils of a lower performance and minor quality are used, the limits for exhaust emissions cannot be met. This in turn poses a risk to engines and exhaust treatment systems. Their functionality is curtailed, damages might occur and operating lives are reduced!

Engine oils meeting API CK-4 comply with the latest emission standards and are developed to protect diesel particulate filters and further exhaust treatment systems. In Europe modern Low and Mid SAPS oils for the application in vehicles with exhaust treatment systems are classified according to ACEA E4, E6, E7 and E9 depending on their content of ash-forming substances.



The table below gives a short overview on differences and similarities:

	ACEA E4	ACEA E6	ACEA E7	ACEA E9
Low SAPS		x		x
Content Sulphated ash	≤ 2	≤ 1	≤ 2	≤ 1
Total Base Number	≥ 12	≥ 7	≥ 9	≥ 7
Euro VI		x		x
Diesel particulate filter		x		x
Selective catalytic reduction (AdBlue)	x	x	x	x
Exhaust gas recirculation	x	x	x	x
Extended service intervals		x		
Fuel B05	x	x	x	x
API CJ-4				x
API CK-4		x	x	

**Play it safe with engine oils of ADDINOL:**

- ✓ excellent engine cleanliness thanks to outstanding cleaning capacity
- ✓ reliable protection against corrosion and wear for long engine lifetimes
- ✓ superior starting and warming up performance for the safe lubrication under all conditions
- ✓ long service intervals by low evaporation losses and high ageing stability
- ✓ reduced exhaust emissions
- ✓ enhanced friction behaviour for low fuel consumption
- ✓ high operational safety and stable performance under all operating conditions
- ✓ perfect protection for exhaust treatment systems (please follow instructions of your vehicle manufacturer!)



**ADDINOL – German Quality since 1936**

The ADDINOL Lube Oil GmbH develops and produces modern lubricants for highest requirements in automotive and industrial applications.

The product range of ADDINOL includes engine and transmission oils of the highest international specifications. More than 150 approvals of leading OEM argue for the outstanding quality of ADDINOL lubricants for all motor and commercial vehicles. Among these OEM are for example Mercedes-Benz, the Volkswagen group, MAN, Renault, Scania, Volvo and MTU.

Research & Development is one of the core competencies of our company. ADDINOL provides intelligent solutions which guarantee optimum lubrication and ensure responsibility towards the environment at the same time.

In close co-operation with leading vehicle manufacturers ADDINOL develops the required products at the latest state of ever progressing art, specifically tailored to modern engine technologies and exhaust treatment systems.

With distributor partners in more than 90 countries ADDINOL is represented on all continents. The experts at ADDINOL have comprehensive tribological know-how and experience. Our range of more than 600 high-performance lubricants and comprehensive service provide the optimum solution for your lubrication-related applications.

**ADDINOL – Improve the performance!**

**ADDINOL Lube Oil GmbH**  
High-Performance Lubricants

Am Haupttor, D-06237 Leuna  
Telephone: +49 (0)3461 - 845 - 111  
Fax: +49 (0)3461 - 845 - 555  
E-Mail: info@addinol.de



www.addinol.de

Handed over by: