



Marine transmissions

List of lubricants TE-ML 04

Product groups	Lubricant classes for service fills (1)
ZF 4 to ZF 115 with all derived variants M, A, IV, C, TS, ATS, IVTS	04D
ZF 220 to ZF 60500 with all derived variants A, V, IV, C, U, D, NR, NR2, NR2H, NR2B, TS, ATS, VTS, IVTS	04A / 04B / 04C
ZF 23560 to ZF 23860 with all derived variants NR, C, D	04B / 04C
ZFW 220 to ZFW 93100 with all derived variants C, NR, NC, DS, NR2H	04A / 04B / 04C
ZFW 93300 and ZFW 103100 with all derived variants	04E / 04F
BW 5 to BW 5300 with all derived variants	04A / 04B / 04C
BW 2356 to BW 2386	04B / 04C
HBW 35 to HBW 630, HSW 90 to HSW 110, HSW 125 to HSW 800 with all derived variants	04D
IRM 40 to IRM 50	04D
IRM 220 to IRM 350	04A / 04B / 04C
PPD, PPS	Gear oils of viscosity grade SAE 80W-90 (2) - API GL-5 and MIL-L-2105D or - MIL-PRF-2105E or - SAE J 2360

(1) Refer to the following pages for approved commercial products.

(2) All gear oils which satisfy the named specifications may be used.

A Multipurpose grease classified KP2K-20 acc. to DIN 51825 or ISO-L-XBCHB2 acc. to ISO 6743-9 must be used on greasing points (basic oil API Group 1, 2, 3 or 4, EP additives, lithium saponified, temperature use limits min. between -20 and +120° C, NLGI-Class 2).

Additives of any kind added **later** to the oil change the oil in a manner that is unpredictable, and they are therefore not permitted. No liability of any kind will be accepted by ZF for any damage resulting from the use of such additives.

The list of lubricants TE-ML 04, **Edition 08.07.2013** replaces all previous editions. The current list can be requested from any ZF after-sales service center or accessed on the Internet under www.zf.com/lubricants.

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Lubricant class 04A

Monograde engine oil

API CD/CE/CF-4/CF/CG-4/CH-4/CI-4/CI-4 Plus/CJ-4

API SF/SG/SH/SJ/SL/SM

ACEA categories A/B/E

Viscosity grade: SAE 30, also SAE 40 in hot countries or when oil sump temperatures are above +80°C

Note:

1. All mineral oil-based trade products which satisfy the above specifications may be used. There will be no product listing.
2. For transmissions which are classified according to DNV, fluids of this class 04A may not be used. Instead of this fluids according to classes 04B or 04C may be used.

Lubricant class 04B**Monograde engine oils**

Viscosity grade: SAE 30, also SAE 40 in hot countries or when oil sump temperatures are above +80°C

Manufacturer (04B)

ADDINOL LUBE OIL GMBH, LEUNA/DE
 ADDINOL LUBE OIL GMBH, LEUNA/DE
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CJSC "ZAVOD IMENI SHAUMYANA", SAINT-PETERSBURG/RU
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 FUCHS PETROLUB AG, MANNHEIM/DE
 FUCHS PETROLUB AG, MANNHEIM/DE
 FUCHS PETROLUB AG, MANNHEIM/DE
 GULF OIL INTERNATIONAL, MUMBAI/IN
 INA MAZIVA LTD., ZAGREB/HR
 IPIRANGA PRODUTOS DE PETROLEO SA, RIO DE JANEIRO/BR
 ITW CHEMICAL PRODUCTS, EMBU/BR
 ITW CHEMICAL PRODUCTS, EMBU/BR
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 PANOLIN AG, MADETSWIL/CH
 PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR
 PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR
 PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR
 PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR

Trade name (04B)

ADDINOL TURBO DIESEL MD 305 SAE 30
 ADDINOL TURBO DIESEL MD 405 SAE 40
 URSA TRANS SAE 40
 M-14D2CE (SAE 40)
 MOBIL DELVAC 1630 SAE30
 MOBIL DELVAC 1640 SAE40
 FUCHS TITAN UNIVERSAL HD SAE 30
 FUCHS TITAN UNIVERSAL HD SAE 30 ZF
 FUCHS TITAN UNIVERSAL HD SAE 40
 GULF SUPER DUTY LE 30
 INA GORGONELA S 30
 IPIRANGA ULTRAGEAR 40
 WYNN'S TRANSMISSION WZ 30
 WYNN'S TRANSMISSION WZ 40
 Q8 MOZART DP SAE 30
 Q8 MOZART DP SAE 40
 PANOLIN EXTRA DIESEL 30
 LUBRAX TRM 5 HD SAE 30
 LUBRAX TRM 5 HD SAE 40
 LUBRAX TURBO SAE 30
 LUBRAX TURBO SAE 40
 TUTELA TRANSMISSION ZCS 160 (SAE 80W-90)
 TOTAL CAPRANO TD 30
 TOTAL CAPRANO TD 30
 TOTAL CAPRANO TD 40
 TOTAL CAPRANO TD 40
 TOTAL RUBIA FP 40

Lubricant class 04C

Multigrade engine oil

Viscosity grades: SAE 5W-40 / 10W-40 / 15W-40

Manufacturer (04C)

CHEVRON LUBRICANTS, SAN RAMON, CA/US

EXXONMOBIL CORPORATION, FAIRFAX, VA/US

EXXONMOBIL CORPORATION, FAIRFAX, VA/US

NOVA STILMOIL SPA, MODENA/IT

SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB

SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB

SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB

SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB

SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB

Trade name (04C)

DELO 400 MULTIGRADE SAE 15W-40

MOBIL DELVAC 1 SHC 5W-40

MOBIL DELVAC XHP EXTRA 10W-40

ORION SUPER PLUS 15W40

RIMULA R4L 15W-40 (CJ-4)

ROTELLA T3 15W-40

SHELL RIMULA R3X 15W-40

SHELL RIMULA SUPER 15W-40

SHELL SIRIUS 15W-40

Lubricant class 04D

Automatic Transmission Fluids (ATF)

Manufacturer (04D)

"RS200 MOTOR OIL" PAPANTONIOU S.A., LAKKOMA/GR
 ADDINOL LUBE OIL GMBH, LEUNA/DE
 ADDINOL LUBE OIL GMBH, LEUNA/DE
 ADDINOL LUBE OIL GMBH, LEUNA/DE
 AMALIE PETROQUIMICA, MADRID/ES
 AMALIE PETROQUIMICA, MADRID/ES
 ARAL AG, BOCHUM/DE
 ARAL AG, BOCHUM/DE
 ARAL AG, BOCHUM/DE
 ARAL AG, BOCHUM/DE
 AVIA MINERALÖL-AG, MÜNCHEN/DE
 BAYWA AG MÜNCHEN, MÜNCHEN/DE
 BAYWA AG MÜNCHEN, MÜNCHEN/DE
 BELGIN MADENI YAGLAR TIC. VE SAN. A.S., KOCAELI/TR
 BP PLC., LONDON/GB
 BP PLC., LONDON/GB
 BP PLC., LONDON/GB
 BP PLC., LONDON/GB
 BUCHER AG LANGENTHAL, LANGENTHAL/CH
 BUCHER AG LANGENTHAL, LANGENTHAL/CH
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CEPSA LUBRICANTES SA, MADRID/ES
 CEPSA LUBRICANTES SA, MADRID/ES
 CEPSA LUBRICANTES SA, MADRID/ES
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 COMERCIAL ROSHFRANS, S.A. DE C.V., MEXICO, D.F./MX
 DE OLIEBRON BV, ZWIJNDRECHT/NL
 DEUTSCHE PENTOSIN WERKE GMBH, WEDEL/DE
 DEUTSCHE PENTOSIN WERKE GMBH, WEDEL/DE
 ENI S.P.A., ROME/IT
 ENI S.P.A., ROME/IT
 EUROL B.V., NJIVERDAL/NL
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 FABRIKA MAZIVA FAM AD, KRUEVAC/RS
 FUCHS PETROLUB AG, MANNHEIM/DE
 FUCHS PETROLUB AG, MANNHEIM/DE
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GRUPA LOTOS S.A., GDANSK/PL
 GRUPA LOTOS S.A., GDANSK/PL
 GRUPA LOTOS S.A., GDANSK/PL
 GRUPA LOTOS S.A., GDANSK/PL
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 HARMS MINERALÖLE, PRISDORF/DE
 HARMS MINERALÖLE, PRISDORF/DE
 HUILES BERLIET S.A., SAINT-PRIEST/FR
 IGOL FRANCE, AMIENS/FR
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 INGRAX INDUSTRIA E COMERCIO DE GRAXA S/A, DUQUE DE CAXIAS/BR
 IPIRANGA PRODUTOS DE PETROLEO SA, RIO DE JANEIRO/BR
 ITW CHEMICAL PRODUCTS, EMBU/BR
 ITW CHEMICAL PRODUCTS, EMBU/BR
 KOC AK PETROL URUNLERI SAN.VE TIC.LTD.STI, KOCAELI/TR

Trade name (04D)

ATF D-IIIG
 ADDINOL ATF D II D
 ADDINOL ATF D II E
 ADDINOL ATF D III
 ATF DEXRON II
 ATF DEXRON III
 ARAL GETRIEBEÖL ATF 22
 ARAL GETRIEBEÖL ATF 55
 ARAL GETRIEBEÖL ATF E-S
 ARAL GETRIEBEÖL ATF LD
 AVIA FLUID ATF 92 S
 TECTROL ATF 3000
 TECTROL ATF 4000
 LUBEX ATF-II
 BP AUTRAN DX III
 BP AUTRAN LTF
 BP AUTRAN MBX
 BP AUTRAN SYN 295
 ATF SUPER
 MOTOREX ATF II E SYNTHETIC
 CASTROL ATF DEX II MULTIVEHICLE
 CASTROL TRANSMAX DEX III MULTIVEHICLE
 CASTROL TRANSMAX Z
 CASTROL TRANSYND
 CEPSA ATF 2000 S
 CEPSA ATF 3000 S
 CEPSA ATF 70
 HAVOLINE ATF MERCON V
 SYNTHETIC AUTOMATIC TRANSMISSION FLUID HEAVY DUTY
 TEXAMATIC B
 ATF ALLPOWER MULTIVEHICULOS
 TOR ATF DMM
 PENTOSIN ATF 1
 PENTOSIN ATF IIIH
 AGIP ATF II D
 AGIP DEXRON III
 EUROL ATF IIIF
 ESSO ATF D 2
 MOBIL ATF 220
 MOBIL ATF 320
 MOBIL ATF D 21065
 MOBIL ATF LT 71141
 MOBIL ATF SHC
 MOBIL DELVAC SYNTHETIC ATF
 ATF DII
 FUCHS TITAN ATF 3000
 FUCHS TITAN ATF 4000
 G-BOX ATF DX II
 G-BOX ATF DX III
 LOTOS ATF II D
 LOTOS ATF II D
 LOTOS ATF IIIG
 LOTOS ATF SUPER III G
 GULF ATF DX II
 GULF ATF DX III H
 GULF ATF PC
 OILFINO SPONTE ATF II
 OILFINO SPONTE ATF III
 RTO STARMATIC 3
 ATF 700
 INA ATF DX IID
 INA ATF DX III
 INA ATF EKSTRA
 INA ATF SUPER
 UNIMATIC D-II PLUS
 ISAMATIC V
 WYNN'S ATF IID WZ
 WYNN'S MULTI ATF WZ
 ATF DEXRON S III

KOCAK PETROL URUNLERI SAN.VE TIC.LTD.STI, KOCAELI/TR	SPEEDOL ATF DEXRON II
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL	Q8 AUTO 14
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL	Q8 AUTO 15
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL	Q8 AUTO 15 ED
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL	Q8 AUTO 20
MOL-LUB KFT, ALMASFUZITO/HU	MOL ATF
MOL-LUB KFT, ALMASFUZITO/HU	MOL ATF 3G
MOL-LUB KFT, ALMASFUZITO/HU	MOL ATF SYNT
MOL-LUB KFT, ALMASFUZITO/HU	MOL ATF SYNT 3H
MOTUL SA, AUBERVILLIERS/FR	MOTUL DEXRON II D
MOTUL SA, AUBERVILLIERS/FR	MOTUL DEXRON III
OMV REFINING & MARKETING GMBH, VIENNA/AT	OMV ATF D II
OMV REFINING & MARKETING GMBH, VIENNA/AT	OMV ATF III
OMV REFINING & MARKETING GMBH, VIENNA/AT	OMV ATF S
OMV REFINING & MARKETING GMBH, VIENNA/AT	OMV ATF Z2
OOO "LLK-INTERNATIONAL", MOSCOW/RU	LUKOIL ATF
OOO "LLK-INTERNATIONAL", MOSCOW/RU	LUKOIL ATF SYNTH HD
OOO "LLK-INTERNATIONAL", MOSCOW/RU	LUKOIL ATF SYNTH MN Z3
OOO "LLK-INTERNATIONAL", MOSCOW/RU	LUKOIL ATF SYNTH MULTI
OPET FUCHS MADENI YAG. SAN. VE TIC. A.S., IZMIR/TR	OPET ATF DX II
ORLEN OIL SP. Z O.O., KRAKOW/PL	HIPOL ATF II E
PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT	ATF XT III FLUID
PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT	AUXON II E
PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT	DX FLUID II TS
PANOLIN AG, MADETSWIL/CH	PANOLIN ATF SUPER VTX
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA	HEAVY DUTY SYNTHETIC BLEND ATF
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKROS MATIC
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	ARBOR MTA
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION ATF 120
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION ATF 90
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION GI/A
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION GI/E
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION STARFLUID
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION STARFLUID PS
PHI OIL GMBH, ST. GEORGEN/AT	ATF D3 SILVER
PRISTA OIL HOLDING EAD, RUSE/BG	PRISTA ATF
RALOY LUBRICANTES, S.A. DE C.V., SANTIAGO TIANGUISTEN/MX	TRANSFLUID SYNTHETIC M-5
RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE	RAVENOL DEXRON F III
REPSOL LUBRICANTES Y ESPECIALIDADES, MADRID/ES	REPSOL MATIC ATF
REPSOL LUBRICANTES Y ESPECIALIDADES, MADRID/ES	REPSOL MATIC ATF
REPSOL LUBRICANTES Y ESPECIALIDADES, MADRID/ES	REPSOL MATIC ATF
REPSOL LUBRICANTES Y ESPECIALIDADES, MADRID/ES	REPSOL MATIC III
REPSOL LUBRICANTES Y ESPECIALIDADES, MADRID/ES	REPSOL MATIC SINTETICO
SASOL OIL, RANDBURG/ZA	SYN TRANSMISSION OIL VI
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S6 ATF ZM
SOCIETE COOPERATIVE DES PETROLES, CAIRO/EG	COOP ATF DEXRON 2
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE	SRS WIOLIN ATF D
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE	SRS WIOLIN ATF III
STATOIL LUBRICANTS, STOCKHOLM/SE	STATOIL TRANSWAY PS DX III
STATOIL LUBRICANTS, STOCKHOLM/SE	TRANSWAY ATF ULTRA
TARIMSAN TARIM SAN. VE TIC. A.S, KOCAELI/TR	TARMOND ATF II
TEDEX S.A., PIASECZNO/PL	TEDEX ATF III
TEDEX S.A., PIASECZNO/PL	TEDEX SYNTHETIC ATF
TEXSA DO BRASIL LTDA, UMUARAMA/PR/BR	TEXSA ATF SUPER
TNK LUBRICANTS LLC, MOSCOW/RU	TNK ATF IID
TOTAL LUBRIFIANTS S.A., NANTERRE/FR	ELF ELFMATIC G3
TOTAL LUBRIFIANTS S.A., NANTERRE/FR	GULF ATF HIGH TECH
TOTAL LUBRIFIANTS S.A., NANTERRE/FR	TOTAL FLUIDE G3
TOTAL LUBRIFIANTS S.A., NANTERRE/FR	TOTAL FLUIDE IID
UNIL OPAL, SAUMUR/FR	MATIC D
UNIL OPAL, SAUMUR/FR	MATIC DX III
YORK LUBRICANTS - GINOUVES SAS, LA GARDE/FR	YORK 787
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE	ZF-ECOFUID A PLUS
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE	ZF-LIFEGUARDFLUID 5

Lubricant class 04E

Monograde engine oil

API CD/CE/CF-4/CF/CG-4/CH-4/CI-4/CI-4 Plus/CJ-4

API SF/SG/SH/SJ/SL/SM

ACEA categories A/B/E

Viscosity grade: SAE 50

Note:

All mineral oil-based trade products which satisfy the above specifications may be used. There will be no product listing.

Lubricant class 04F

Oil CLP 220 in accordance with DIN 51517-3

Viscosity grade: ISO VG 220

Manufacturer (04F)

CHEVRON LUBRICANTS, SAN RAMON, CA/US

EXXONMOBIL CORPORATION, FAIRFAX, VA/US

Trade name (04F)

MEROPA 220

MOBILGEAR 600 XP 220