



**Powershift transmissions, type Ecomat ⁽¹⁾,
for buses, trucks, and special vehicles**

List of lubricants TE-ML 14

Table of contents

Page

1. Approved lubricant classes	1
Table 1: Oil and filter change intervals for Ecomat transmissions in buses:	2
Table 2: Oil and filter change intervals for Ecomat transmissions in trucks, off-road equipment and special vehicles:	2
2. Explanation of footnotes and comments	3
3. Lubricant classes and approved trade products	4

1. Approved lubricant classes

Product groups	Lubricant classes for service fills
<p>Ecomat (Oil sump temperatures below 100°C) ⁽³⁾</p> <p>HP500, HP590, HP600 HP502C, HP552C, HP592C, HP602C, HP504C, HP554C, HP594C, HP604C</p> <p>Ecomat HL (Oil sump temperatures below 100°C) ⁽³⁾</p> <p>HP900, HP902</p>	<p>14A / 14B / 14C / 14E Automatic Transmission Fluids (ATF)</p> <p>Refer to the following pages for approved commercial products and oil change intervals</p> <p>Particularly recommended: ZF-Ecofluid A Life (14E) ⁽²⁾</p>
<p>Ecomat (Oil sump temperatures below 105°C) ⁽⁴⁾</p> <p>HP502C, HP552C, HP592C, HP602C, HP504C, HP554C, HP594C, HP604C</p> <p>Ecomat HL (Oil sump temperatures below 105°C) ⁽⁴⁾</p> <p>HP900, HP902</p>	<p>14E</p> <p>Particularly recommended: ZF-Ecofluid A Life (14E) ⁽²⁾</p>

The list of lubricants TE-ML 14, **edition 01.01.2019** 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.

ZF Friedrichshafen AG
D-88038 Friedrichshafen
www.zf.com/contact

Table 1: Oil and filter change intervals for Ecomat transmissions in buses:

Lubricant class (See overleaf for approved trade products)	Oil and filter change interval [km/year] ⁽⁵⁾
14A	30.000 km 1 x year
14B	60.000 km 1 x every 2 years
14C	120.000 km 1 x every 2 years
14E	150.000 km 1 x every 3 years

Note:

In case of initial oil change transition from an ATF of the lubricants category 14A or 14B to an ATF featuring extended oil change intervals, an interim oil change interval after < 60.000 km/max. 2 years is required.

Table 2: Oil and filter change intervals for Ecomat transmissions in trucks, off-road equipment and special vehicles:

Lubricant class (See overleaf for approved trade products)	Oil and filter change interval [h/year]	
	Normal operating conditions (6), (7), (9)	Tough operating conditions (6), (8), (9)
14A	400 h 1 x year	300 h 1 x year
14B	750 h 1 x year	500 h 1 x year
14C	1500 h 1 x year	1000 h 1 x year
14E	2000 h 1 x every 2 years	1500 h 1 x year

Note:

In case of initial oil change transition from an ATF of the lubricants category 14A or 14B to an ATF featuring extended oil change intervals, an interim oil change interval after < 750h/max. 1 year is required.

2. Explanation of footnotes and comments

Footnotes

- (1) Automatic powershift transmissions, type EcoLife, also refer to List of lubricants TE-ML 20.
- (2) The fully synthetic ATF ZF-Ecofluid A Life was specially developed for use in automatic powershift transmissions installed in CVs. The combination of synthetic basic oil on the basis of polyalphaolefin and a specially well balanced package of additives ensures excellent oxidation stability, a very constant friction coefficient, and high-quality protection of all transmission components. As a result of the flat viscosity characteristic curve, the oil is suited for applications in all climate zones, particularly in hot and cold regions.
- (3) Transmissions with oil sump temperatures below 100°C.
- (4) Ecomat 2 plus- and Ecomat 4- transmissions with oil sump temperatures above 100°C may only be operated with fluids from the 14E lubricants category. Always use fluids according to 14E in borderline cases or in the case of uncertainty with reference to transmission operation temperature.
- (5) Oil and filter change required, depending on what occurs first. Use only ZF original filter elements, ZF order no. 4139 298 936.
- (6) Oil and filter change required, depending on what occurs first. Use only ZF original filter elements, ZF order no. 4139 298 936. The operating instructions apply in the case of deviating information.
- (7) Standard application: Fire fighting vehicles, construction machinery, and dumpers with high mileage share.
- (8) Extreme applications: Refuse collection vehicles, vehicles featuring high share of off-road use (low mileage share, high level of shift efforts).
- (9) For military applications, the service intervals apply according to document 4237.700.014. Please contact your respectively responsible ZF-Services employee.

Comments

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.

3. Lubricant classes and approved trade products

Lubricant class 14A

Manufacturer (14A)

ADDINOL LUBE OIL GMBH, LEUNA/DE
 ADDINOL LUBE OIL GMBH, LEUNA/DE
 ALEXANDRIA MINERAL OILS COMPANY, ALEXANDRIA/EG
 ALEXANDRIA MINERAL OILS COMPANY, ALEXANDRIA/EG
 AMALIE PETROQUIMICA, MADRID/ES
 ARAL AG, BOCHUM/DE
 ARAL AG, BOCHUM/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/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
 BUCHER AG LANGENTHAL, LANGENTHAL/CH
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES
 CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 ENI S.P.A., ROME/IT
 EUROL B.V., NJIVERDAL/NL
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 FABRIKA MAZIVA FAM AD, KRUŠEVAC/RS
 FUCHS PETROLUB SE, MANNHEIM/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 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
 HILL CORPORATION, SHYMKENT/KZ
 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
 INGRAX INDUSTRIA E COMERCIO DE GRAXA S/A, DUQUE DE CAXIAS/BR
 KOCÁK PETROL URUNLERI SAN.VE TIC.LTD.STI, KOCAELI/TR
 KOCÁK PETROL URUNLERI SAN.VE TIC.LTD.STI, KOCAELI/TR
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE
 LIQUI MOLY GMBH, ULM/DE
 MEGUIN GMBH & CO. KG, SAARLOUIS/DE
 MOL-LUB KFT, ALMASFUZITO/HU
 MOL-LUB KFT, ALMASFUZITO/HU
 MOTUL SA, AUBERVILLIERS/FR
 MOTUL SA, AUBERVILLIERS/FR
 OILFINO MINERALÖL GMBH, PRISDORF/DE
 OILFINO MINERALÖL GMBH, PRISDORF/DE
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 ORLEN OIL SP. Z O.O., KRAKOW/PL
 OY TEBOIL AB, HELSINKI/FI
 PETROGAL S.A., LISBOA/PT
 PETROGAL S.A., LISBOA/PT
 PETROL OFISI A.S., ISTANBUL/TR
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PHI OIL GMBH, ST. GEORGEN/AT
 PRISTA OIL HOLDING EAD, RUSE/BG
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES

Trade name (14A)

ADDINOL ATF D II D
 ADDINOL ATF D III
 AMOC POWER
 AMOC POWER PLUS
 ATF DEXRON II
 ARAL GETRIEBEÖL ATF 55
 ARAL GETRIEBEÖL ATF 22
 AVISTA SUPER FLUID TYP P/CN
 AVISTA SUPER FLUID ATF 3000
 PENNASOL SUPER FLUID ATF 3000
 PENNASOL SUPER FLUID TYP P/CN
 MOTOR GOLD FLUIDTEC TYP P/CN
 MOTOR GOLD FLUIDTEC ATF 3000
 TECTROL ATF 4000
 TECTROL ATF 3000
 LUBEX ATF-II
 BP AUTRAN DX III
 BP AUTRAN MBX
 ATF SUPER
 CASTROL TRANSMAX DEX III MULTIVEHICLE
 CASTROL ATF DEX II MULTIVEHICLE
 CASTROL TRANSMAX ATF DX II MULTIVEHICLE
 CASTROL TRANSMAX ATF DX III MULTIVEHICLE
 CEPSA ATF 70
 CEPSA ATF 2000S
 TEXAMATIC 4291
 AGIP ATF II D
 EUROL ATF IIIF
 MOBIL ATF 220
 MOBIL ATF 320
 ATF DII
 STATOIL TRANSWAY PS DX III
 FUCHS TITAN ATF 3000
 FUCHS TITAN ATF 4000
 PENTOSIN ATF IIIH
 G-BOX ATF DXII
 LOTOS ATF II D
 LOTOS ATF II D
 LOTOS ATF IIIG
 GULF ATF DX III H
 GULF ATF DX II
 GULF ATF PC
 FASTROIL ATF 3
 RTO STARMATIC 3
 IGOL ATF 430
 INA ATF SUPER
 INA ATF DX III
 INA ATF DX IID
 UNIMATIC D-II PLUS
 SPEEDOL ATF DEXRON II
 SPEEDOL ATF DEXRON S III
 Q8 AUTO 20
 Q8 AUTO 14
 Q8 AUTO 14
 Q8 AUTO 15
 LIEBHERR HYDRAULIC-GEAR ATF
 LIQUI MOLY ATF DEXRON IID
 MEGOL HYDRAULIKOEL ATF DEXRON II D
 MOL ATF 3G
 MOL ATF
 MOTUL DEXRON III
 MOTUL DEXRON II D
 OILFINO SPONTE ATF II
 OILFINO SPONTE ATF III
 LUKOIL ATF
 LUKOIL ATF IID
 LUKOIL ATF III
 LUKOIL ATF IIIG
 HIPOL ATF II D
 TEBOIL FLUID E
 GALP TRANSMATIC D II
 GALP TRANSMATIC D III
 ATF DX-3
 TUTELA TRANSMISSION GI/A
 TUTELA TRANSMISSION STARFLUID
 TUTELA TRANSMISSION GI/E
 AKROS MATIC
 ARBOR MTA
 TUTELA TRANSMISSION STARFLUID HD-ED
 ATF D3 SILVER
 PRISTA ATF
 REPSOL MATIC ATF
 REPSOL MATIC ATF
 REPSOL MATIC ATF

ZF approval number

ZF000698
 ZF000699
 ZF001702
 ZF001703
 ZF001128
 ZF000146
 ZF000147
 ZF002128
 ZF002129
 ZF002296
 ZF002297
 ZF002311
 ZF002312
 ZF001907
 ZF001908
 ZF001031
 ZF000194
 ZF000196
 ZF000593
 ZF000220
 ZF000223
 ZF003358
 ZF003368
 ZF001939
 ZF002040
 ZF001574
 ZF000925
 ZF000387
 ZF000033
 ZF000043
 ZF001187
 ZF000487
 ZF000720
 ZF000728
 ZF000783
 ZF001955
 ZF000362
 ZF001043
 ZF001093
 ZF000078
 ZF001099
 ZF001349
 ZF003429
 ZF001259
 ZF002315
 ZF000248
 ZF000390
 ZF000392
 ZF000979
 ZF001388
 ZF000083
 ZF000176
 ZF001991
 ZF002269
 ZF002119
 ZF002052
 ZF001992
 ZF001179
 ZF001251
 ZF001008
 ZF001104
 ZF000736
 ZF000737
 ZF001146
 ZF001759
 ZF001760
 ZF003430
 ZF000081
 ZF003321
 ZF000331
 ZF001425
 ZF001667
 ZF000308
 ZF000309
 ZF000481
 ZF000485
 ZF000486
 ZF000992
 ZF001003
 ZF000355
 ZF000022
 ZF000222
 ZF000222
 ZF000224

Manufacturer (14A)

RN-LUBRICANTS, LLC, MOSCOW/RU
 ROLF LUBRICANTS GMBH, LEVERKUSEN/DE
 ROLF LUBRICANTS GMBH, LEVERKUSEN/DE
 ROWE MINERALÖLWERK GMBH, WORMS/DE
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SPECOL SP. Z O.O., CHORZOW/PL
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
 TEDEX S.A., WARSZAWA/PL
 TEXSA DO BRASIL LTDA, UMUARAMA/PR/BR
 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
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR
 UNIL OPAL, SAUMUR/FR
 UNIL OPAL, SAUMUR/FR
 UNIX AUTO, BUDAPEST/HU
 VALVOLINE EUROPE, DORDRECHT/NL
 YORK LUBRICANTS - GINOUVES SAS, LA GARDE/FR

Trade name (14A)

ROSNEFT KINETIC ATF IID
 ROLF ATF IID
 ROLF ATF IIIG
 ROWE HIGHTEC ATF 8000
 SHELL SPIRAX S2 ATF AX
 HIPOSPEC ATF IID
 SRS WIOLIN ATF D
 SRS WIOLIN ATF III
 TEDEX ATF II D
 TEXSA ATF SUPER
 ELF ELFMATIC G3
 GULF ATF HIGH TECH
 TOTAL FLUIDE G3
 TOTAL FLUIDE II D
 ELF ELFMATIC G3
 TOTAL FLUIDE II D
 TOTAL FLUIDE II D
 TOTAL FLUIDE II D
 FLUIDE AT 42
 MATIC DX III
 MATIC D
 A.Z.MEISTERTEILE AUTOMATIKGETRIEBEÖL ATF
 VALVOLINE HEAVY DUTY ATF PRO
 YORK 787

ZF approval number

ZF003440
 ZF003371
 ZF003372
 ZF001938
 ZF000374
 ZF003354
 ZF000438
 ZF000439
 ZF002043
 ZF001207
 ZF001152
 ZF001257
 ZF001663
 ZF001668
 ZF001699
 ZF001723
 ZF001724
 ZF001725
 ZF002100
 ZF001010
 ZF001071
 ZF002192
 ZF001873
 ZF000597

Lubricant class 14B(*) Not approved for special transmissions with ratio $i=5.6-0.83/1.0$

Manufacturer (14B)	Trade name (14B)	ZF approval number
ADDINOL LUBE OIL GMBH, LEUNA/DE	ADDINOL ATF D II E (*)	ZF000697
ASTRIS SA, GIORNICO/CH	ASTRIS ATF GLOBAL	ZF002187
BARDAHL ASIA PACIFIC PTE LTD, SINGAPORE/SG	SYNMAXTRAN-HD	ZF002246
BELGIN MADENI YAGLAR TIC. VE SAN. A.S., KOCAELI/TR	LUBEX ATF-III KYS	ZF002255
BELGIN MADENI YAGLAR TIC. VE SAN. A.S., KOCAELI/TR	LUBEX ATF-III KYS	ZF002293
BUCHER AG LANGENTHAL, LANGENTHAL/CH	ATF TP	ZF003609
CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES	CEPSA ATF 3000 S	ZF000386
CHEVRON LUBRICANTS, SAN RAMON, CA/US	HAVOLINE ATF MERCON V	ZF000101
CHEVRON LUBRICANTS, SAN RAMON, CA/US	SYNTHETIC AUTOMATIC TRANSMISSION FLUID HEAVY DUTY	ZF001219
CHEVRON LUBRICANTS, SAN RAMON, CA/US	DELO SYN ATF HD	ZF001664
CHEVRON LUBRICANTS, SAN RAMON, CA/US	HAVOLINE MULTI-VEHICLE ATF	ZF001714
COMERCIAL ROSHFRANS, S.A. DE C.V., MEXICO, D.F./MX	ATF ALLPOWER MULTIVEHICULOS	ZF000385
ENI S.P.A., ROME/IT	ENI ROTRA ATF II E	ZF000951
ENI S.P.A., ROME/IT	ENI ROTRA ATF MULTI	ZF003452
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBIL ATF SHC (*)	ZF000039
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBIL ATF LT 71141	ZF000044
FUCHS PETROLUB SE, MANNHEIM/DE	FUCHS TITAN ATF 5005	ZF000717
FUCHS PETROLUB SE, MANNHEIM/DE	PENTOSIN ATF 1	ZF000734
FUCHS PETROLUB SE, MANNHEIM/DE	TRANSWAY ATF EXTRA	ZF001332
GAZPROMNEFT-LUBRICANTS, MOSCOW/RU	G-BOX ATF DX III	ZF001956
GAZPROMNEFT-LUBRICANTS, MOSCOW/RU	G-BOX ATF DX III	ZF002221
GRUPA LOTOS S.A., GDANSK/PL	LOTOS ATF SUPER III G	ZF000620
HUILES BERLIET S.A., SAINT-PRIEST/FR	RTO STARMATIC S3	ZF001579
IGOL FRANCE, AMIENS/FR	ATF 700	ZF001833
INA MAZIVA LTD., ZAGREB/HR	INA ATF EKSTRA (*)	ZF000410
INA MAZIVA LTD., ZAGREB/HR	INA ATF DX IIIH	ZF002314
IPIRANGA PRODUTOS DE PETRÓLEO SA, RIO DE JANEIRO/BR	ISAMATIC V	ZF000896
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL	Q8 AUTO 15 ED	ZF002121
LUBRICATION ENGINEERS, INC., FORT WORTH, TEXAS/US	LE 1150	ZF001676
MOL-LUB KFT, ALMASFUZITO/HU	MOL ATF SYNT (*)	ZF001155
MOL-LUB KFT, ALMASFUZITO/HU	MOL ATF SYNT 3H	ZF001895
MORRIS LUBRICANTS, SHREWSBURY/GB	MULTITRANS ACV	ZF002268
OOO "LLK-INTERNATIONAL", MOSCOW/RU	LUKOIL ATF SYNTH HD	ZF001125
OOO "LLK-INTERNATIONAL", MOSCOW/RU	LUKOIL ATF SYNTH MULTI	ZF001127
OOO "LLK-INTERNATIONAL", MOSCOW/RU	LUKOIL ATF SYNTH MULTI	ZF001944
OOO "LLK-INTERNATIONAL", MOSCOW/RU	LUKOIL ATF SYNTH (*)	ZF003407
ORLEN OIL SP. Z O.O., KRAKOW/PL	HIPOL ATF II E (*)	ZF000501
PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT	AUXON II E	ZF000048
PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT	DX FLUID II TS (*)	ZF000376
PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT	ATF XT III FLUID	ZF001177
PANOLIN AG, MADETSWIL/CH	PANOLIN ATF SUPER VTX	ZF001218
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA	HEAVY DUTY SYNTHETIC BLEND ATF	ZF001236
PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR	LUBRAX ATF HD	ZF002120
PETROMIN CORPORATION, JEDDAH/SA	PETROMIN ATF Z20 ECO	ZF001974
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION STARFLUID PS	ZF000993
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION ATF 90	ZF001599
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	PETRONAS TUTELA ATF 700 HD	ZF003627
PHI OIL GMBH, ST. GEORGEN/AT	ATF D3 GOLD	ZF003507
RALOY LUBRICANTES, S.A. DE C.V., SANTIAGO TIANGUISTEN/MX	TRANSFLUID SYNTHETIC M-5	ZF001025
RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE	RAVENOL DEXRON III H	ZF001609
REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES	REPSOL MATIC III	ZF000318
REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES	REPSOL MATIC LD ATF	ZF001751
ROWE MINERALÖLWERK GMBH, WORMS/DE	ROWE HIGHTEC ATF 9000	ZF001937
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S6 ATF VM PLUS	ZF001371
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S6 ATF VM	ZF001463
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SPIRAX S4 ATF HDX	ZF001812
SINOPEC LUBRICANT CO., LTD., BEIJING/CN	SINOPEC GREATWALL ATF III LD	ZF001360
SINOPEC LUBRICANT CO., LTD., BEIJING/CN	SINOPEC GREATWALL ATF HD S	ZF003346
SINOPEC LUBRICANT CO., LTD., BEIJING/CN	SINOPEC GREATWALL ATF HD	ZF003348
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE	SRS WIOLIN ATF III MV	ZF002061
TEDEX S.A., WARSZAWA/PL	TEDEX SYNTHETIC ATF (*)	ZF001279
TEDEX S.A., WARSZAWA/PL	TEDEX ATF III	ZF001350
TONGYI PETROLEUM CHEMICAL CO., LTD., BEIJING/CN	LINGXIAN 6+ AUTOMATIC TRANSMISSION FLUID	ZF003377
TOTAL LUBRIFIANTS S.A., NANTERRE/FR	TOTAL FLUIDE XLD FE	ZF001464
TOTAL LUBRIFIANTS S.A., NANTERRE/FR	TOTAL FLUIDMATIC SYN	ZF001569
TOTAL LUBRIFIANTS S.A., NANTERRE/FR	ELF ELFMATIC G3 SYN	ZF001582
UNITED OIL COMPANY PTE LTD, SINGAPORE/SG	UNITED MV 99	ZF003562
VALVOLINE EUROPE, DORDRECHT/NL	VALVOLINE HEAVY DUTY ATF PRO LD (*)	ZF001872
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE	ZF-LIFEGUARDFLUID 5	ZF001363

Lubricant class 14C**Manufacturer (14C)**

ALLEGHENY PETROLEUM, WILMERDING, PA/US
 AMSOIL, INC., SUPERIOR, WI/US
 ARAL AG, BOCHUM/DE
 BASF SE, LUDWIGSHAFEN/DE
 BP PLC., LONDON/GB
 BP PLC., LONDON/GB
 BUCHER AG LANGENTHAL, LANGENTHAL/CH
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 EXOL LUBRICANTS LTD, WEDNESBURY/GB
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 FUCHS PETROLUB SE, MANNHEIM/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 H. BANTLEON GMBH / GESELLS. D. AVIA, ULM/DE
 HI-TEC OILS, SMITHFIELD/AU
 LUBRICATING SPECIALTIES COMPANY, PICO RIVERA/US
 MOTUL SA, AUBERVILLIERS/FR
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 OY TEBOIL AB, HELSINKI/FI
 PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT
 PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT
 PETROGAL S.A., LISBOA/PT
 PETROMIN CORPORATION, JEDDAH/SA
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 SASOL OIL, RANDBURG/ZA
 SINOPEC LUBRICANT CO., LTD., BEIJING/CN
 SINOPEC LUBRICANT CO., LTD., BEIJING/CN
 TEDEX S.A., WARSZAWA/PL
 TONGYI PETROLEUM CHEMICAL CO., LTD., BEIJING/CN
 VALVOLINE AUSTRALIA PTY LTD, WETHERILL PARK, NSW/AU
 VALVOLINE EUROPE, DORDRECHT/NL

Trade name (14C)

ALTRA SHL EXTENDED DRAIN ZF 20C
 TORQUE-DRIVE SYNTHETIC ATF
 ARAL GETRIEBEÖL ATF LD
 EMGARD 2805
 BP AUTRAN LTF
 BP AUTRAN SYN 295
 ATF VZ
 CASTROL TRANSMAX Z
 CASTROL TRANSYND
 CASTROL TRANSMAX ATF Z
 TES-295 SYN TRANSMISSION FLUID
 AUTOTRANS ELC
 MOBIL DELVAC SYNTHETIC ATF
 MOBIL DELVAC 1 ATF
 TRANSWAY ATF ULTRA
 FUCHS TITAN ATF 5500
 AVILUB FLUID ATZ 295
 MULTITRANS PLUS ATF
 MV TYPE 20C ATF
 MOTUL ATF HD
 LUKOIL ATF SYNTH MN Z3
 TEBOIL FLUID ES-MAX
 AUXON III PLUS
 ATF XT III FLUID PLUS
 GALP TRANSMATIC Z
 PETROMIN ATF Z20 LD
 REPSOL MATIC SINTETICO
 SYN TRANSMISSION OIL VI
 SINOPEC GREATWALL FULLY SYNTHETIC ATF HD S
 SINOPEC GREATWALL SYNTHETIC ATF HD
 TEDEX ATF SYNTHETIC (S)
 LINGXIAN 10+ AUTOMATIC TRANSMISSION FLUID
 HEAVY DUTY ATF PRO ECO PLUS
 VALVOLINE HEAVY DUTY ATF PRO ECO

ZF approval number

ZF001756
 ZF001841
 ZF000144
 ZF003370
 ZF000195
 ZF000197
 ZF003369
 ZF000221
 ZF000226
 ZF002158
 ZF002298
 ZF001685
 ZF001234
 ZF001827
 ZF001330
 ZF001797
 ZF002288
 ZF001669
 ZF002208
 ZF003587
 ZF001302
 ZF001726
 ZF001466
 ZF001748
 ZF001893
 ZF002003
 ZF003586
 ZF001091
 ZF003345
 ZF003347
 ZF002213
 ZF003378
 ZF003488
 ZF001871

Lubricant class 14E**Manufacturer (14E)**

PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE

Trade name (14E)

TUTELA TRANSMISSION ATF 120
SHELL SPIRAX S6 ATF ZM
ZF ECOFLUID A LIFE

ZF approval number

ZF000053
ZF001483
ZF001671