



Industrial Technology

Axles for construction machinery

List of lubricants TE-ML 05

Table of contents

Page

1. Current products	2
2. Products not listed in detail	3
3. Hydraulic fluids	3
4. Greasing points	3
5. Load classes	3
6. Oil change intervals	4
6.1 Initial oil change intervals	4
6.2 Subsequent oil change intervals	4
7. Explanation of footnotes and comments	4
8. Lubricant classes and approved trade products	5

The list of lubricants TE-ML 05, **edition 01.04.2026** replaces all previous editions. The current list can be requested from any ZF after-sales service center or accessed on the Internet under www.aftermarket.zf.com/lubricants.

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

1. Current products








Product groups	Series	Lubricant classes for service fills ⁽¹⁾
Compactor	MT-C 3035, MT-C 3065, MT-C 3075	ZF PowerFluid Gear LS 05C / 05N
Motor grader	MT-G 3070, MT-G 3075, MT-G 3080, MT-G 3085, MT-G 3090, WH-L3065, WH-L3075	ZF PowerFluid Plus 05E / 05F / 05G
Dumper	Axle/Wheel head: MT-D 3105	ZF PowerFluid Gear LS ZF PowerFluid Plus 05C / 05E / 05F / 05G / 05N
	Brake: MT-D 3105, WH-D 3105	ZF PowerFluid Plus 05E / 05F / 05G
	Axle inserts	ZF PowerFluid Gear LS ZF PowerFluid Plus 05C / 05E / 05F / 05G / 05N
	MT-D 3085 II, MT-D 3095 II, MT-D 3110	ZF PowerFluid Plus 05E / 05F / 05G
Wheel loader	MT-L 3065, MT-L 3075, MT-L 3085, MT-L 3095, MT-L 3105, MT-L 3110, MT-L 3115, MT-L 3125, MT-L 3135 AP-410, AP-412, AP-L 3085, AP-L 3095	ZF PowerFluid Gear LS ZF PowerFluid Plus 05C / 05E / 05F / 05G / 05N
Backhoe loader	Rear axle: MT-B 3065, MT-B 3070, MT-2075, MT-2085	ZF PowerFluid Plus 05E / 05F / 05G
	Front axle: MS-B 3025, MS-2045, MS-B 3035	ZF PowerFluid Gear LS ZF PowerFluid Plus 05C / 05E / 05F / 05G / 05N
Telescopic handler	MS-T 3045, MS-T 3055, MS-T 3060	ZF PowerFluid Plus 05E / 05F / 05G
Compact loader	AV230	ZF PowerFluid Gear LS 05A / 05C / 05N
	MT-L 3010, MT-L 3015, MT-L 3020, MT-L 3025, MT-L 3035, MT-L 3045, MT-L 3055 MS-L 3015	ZF PowerFluid Gear LS ZF PowerFluid Plus 05C / 05E / 05F / 05G / 05N
	MT-L 3010 eCD, MT-L 3015 eCD, MT-L 3020 eCD, MT-L 3025 eCD	ZF PowerFluid Plus 05E / 05F / 05G
Compact loader with electric drive		
Mobile excavator	MS-E 3050, MT-E 3050, MS-E 3060, MT-E 3060, MS-E 3070, MT-E 3070	ZF PowerFluid Gear LS ZF PowerFluid Plus 05C / 05E / 05F / 05G / 05N The TE-ML 07 must be observed for directly fitted HL transmissions.

2. Products not listed in detail

Product groups	Lubricant classes for service fills ⁽¹⁾	
	without	with
	wet multi-disc brakes and / or multi-disk limited-slip differentials	
Axles Differentials Axle inserts Wheel hubs	ZF PowerFluid Gear LS ZF PowerFluid Plus 05A / 05C / 05N 05E / 05F / 05G	ZF PowerFluid Gear LS ZF PowerFluid Plus 05C / 05E / 05F / 05G / 05N
Axles, differentials and axle inserts with hypoid drive	ZF PowerFluid Gear LS 05A / 05C / 05N	ZF PowerFluid Gear LS 05C / 05N

Note: APL 9000 see TE-ML 12

3. Hydraulic fluids

Product group	Lubricant classes for service fills ⁽¹⁾	Use at outside temperatures
Brake hydraulics, hydraulic differential lock (DHL) and steering	05L	- 40°C 
	lubricants in accordance with JDM J20D	- 40°C 
	05E / 05F (only lubricants in accordance with JDM J20C), 05G	- 30°C 
	05K	- 30°C 
	05M (ISO VG 32)	- 40°C  + 20°C
	05M (ISO VG 46)	- 10°C 
	05M (ISO VG 68)	- 5°C 

4. Greasing points

Product groups	Lubricant classes for service fills ⁽¹⁾
Swivel bearing axles, motor grader: MT-G 3070, MT-G 3075, MT-G 3080, MT-G 3085, MT-G 3090	05P Lubricating interval acc. to corresponding lubricating and maintenance specifications
Other	05Q Lubricating interval acc. to corresponding lubricating and maintenance specifications.

5. Load classes

Load class	Examples of applications
1	- Mobile excavator with low driving-mode share (<25%) and equipment in material handling - Wheel loader and Dumper with low share of service brake use - Other axles without wet brakes
2	- Mobile excavator with increased driving-mode share (>25%) and equipment in timber handling - Wheel loader, grader, telescopic handler, Dumper - Backhoe loader under normal operating conditions - Compactors
3	- Wheel loader and Dumper operated under extreme braking conditions - Backhoe loader under extreme operating conditions - Generally all vehicles operated in outdoor temperatures > 40°C

6. Oil change intervals

6.1 Initial oil change intervals

Lubricant class	ZF filling ex works
Load class	Oil change intervals
1	2000 h ⁽²⁾
2	1500 h ⁽²⁾
3	1000 h ⁽²⁾

Note: The original ZF factory fill is to remain in the axle for at least the first 500 operating hours; it is not recommended to change the oil earlier.

6.2 Subsequent oil change intervals

Lubricant class	05A	ZF PowerFluid Gear LS 05C / 05F / 05N	ZF PowerFluid Plus 05E / 05G
Load class	Oil change intervals		
1	1500 h	2000 h	4000 h
2	1000 h	1500 h	3000 h
3	500 h	1000 h	2000 h

7. Explanation of footnotes and comments

Footnotes

- (1) Refer to the following pages for approved commercial products.
For information on oil change intervals, refer to Section 6.
- (2) The original ZF factory fill is to remain in the axle for at least the first 500 operating hours; it is not recommended to change the oil earlier.

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.

Viscosity grades: SAE 75W-90 / 75W-110 / 75W-140 / 80W-90 / 85W-90 / 90

ZF approval number

ZF000672
ZF002260
ZF003561
ZF003620
ZF012039
ZF012196
ZF012197
ZF012198
ZF004780
ZF004797
ZF002316
ZF002317
ZF002318
ZF001716
ZF012143
ZF005978
ZF006035
ZF011935
ZF011981
ZF004734
ZF004735
ZF000910
ZF001320
ZF001754
ZF002142
ZF002143
ZF002144
ZF002163
ZF004885
ZF006097
ZF003554
ZF001196
ZF002137
ZF002254
ZF002273
ZF002274
ZF003353
ZF002270
ZF008203
ZF008233
ZF000829
ZF001604
ZF000964
ZF010792
ZF003351
ZF000653
ZF001456
ZF001749
ZF008055
ZF000856
ZF000860
ZF003364
ZF000041
ZF000042
ZF000776
ZF001681
ZF001682
ZF003699
ZF002734
ZF008180
ZF008179
ZF008309
ZF008310
ZF008311
ZF009835
ZF012014
ZF012155
ZF002249
ZF002299
ZF012141
ZF000642
ZF000645
ZF000647
ZF000647
ZF000650
ZF000722
ZF001030
ZF001036
ZF001195
ZF003341
ZF003624
ZF004809
ZF004810

ZF approval number

FUCHS PETROLUB SE, MANNHEIM/DE	FUCHS PETROLUB SE, MANNHEIM/DE	FUCHS PETROLUB SE, MANNHEIM/DE
FUCHS PETROLUB SE, MANNHEIM/DE	PENTOSIN GEAR PRO SAE 75W-90	ZF004930
FUCHS PETROLUB SE, MANNHEIM/DE	PENTOSIN GEAR ULTRA SAE 75W-90	ZF004931
FUCHS PETROLUB SE, MANNHEIM/DE	TITAN SUPERGEAR MC SAE 80W-140	ZF006028
FUCHS PETROLUB SE, MANNHEIM/DE	TITAN SUPERGEAR PLUS SAE 80W-90	ZF010958
FUCHS PETROLUB SE, MANNHEIM/DE	FUCHS TITAN CYTRAC RR SAE 75W-90	ZF000732
GS CALTEX CORPORATION, SEOUL/KR	KIXX GEARTEC X GL-5 80W-90	ZF003553
GULF OIL INTERNATIONAL, MUMBAI/IN	GULF GEAR TDL 80W-90	ZF000780
GULF OIL INTERNATIONAL, MUMBAI/IN	GULF SYNGEAR 75W-90	ZF000863
GULF OIL INTERNATIONAL, MUMBAI/IN	GULF GEAR LD 80W-90	ZF001950
HILL CORPORATION, SHYMKENT/KZ	FASTROIL MTF5 80W-90	ZF003435
HUILES BERLIET S.A., SAINT-PRIEST/FR	LONGEVIA TC ECO 80W-90	ZF008379
HUILES BERLIET S.A., SAINT-PRIEST/FR	LONGEVIA TCX ECO 75W-90	ZF008392
HUILES BERLIET S.A., SAINT-PRIEST/FR	LONGEVIA HD 80W-90	ZF008396
IGOL FRANCE, AMIENS/FR	SYNTHEGEAR 75W-90	ZF008361
INA MAZIVA LTD., ZAGREB/HR	INA HIPENOL TDL 80W-90	ZF000432
INA MAZIVA LTD., ZAGREB/HR	INA HIPENOL SHD 75W-90	ZF000977
INGRAX INDUSTRIA E COMERCIO DE GRAXA S/A, DUQUE DE CAXIAS/BR	MULTITIGEROL 85W140	ZF001630
KUWAIT PETROLEUM (BELGIUM) N.V., ANTWERP/BE	Q8 TRANS XGS 75W-90	ZF000179
KUWAIT PETROLEUM (BELGIUM) N.V., ANTWERP/BE	Q8 TRANS XGR 75W-140	ZF000853
KUWAIT PETROLEUM (BELGIUM) N.V., ANTWERP/BE	Q8 GEAR OIL XG SAE 80W-90	ZF002103
KUWAIT PETROLEUM (BELGIUM) N.V., ANTWERP/BE	Q8 AXLE OIL XG SAE 80W-140	ZF002102
KUWAIT PETROLEUM (BELGIUM) N.V., ANTWERP/BE	Q8 SYNTHETIC GEAR OIL SAE 80W-140	ZF002105
LAEMMLE CHEMICALS AG, MADETSWIL/CH	ROXOR SUPER DUTY SYNTH 75W-90	ZF009457
LAEMMLE CHEMICALS AG, MADETSWIL/CH	ROXOR TOPGEAR 80W-90	ZF010966
LAEMMLE CHEMICALS AG, MADETSWIL/CH	ROXOR SUPER DUTY SYNTH 75W-140	ZF010967
LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE	LIEBHERR SYNTOGEAR PLUS 75W-90	ZF006012
LIQUI MOLY GMBH, ULM/DE	LIQUI MOLY HYPOID GETRIEBEÖL TDL SAE 80W-90	ZF001323
LIQUI MOLY GMBH, ULM/DE	LIQUI MOLY VOLLSYN. HYPOID GETR.ÖL TRUCK (75W-90)	ZF001347
LUKOIL LUBRICANTS EUROPE GMBH, VIENNA/AT	LUKOIL TRANSMISSION SYNTH BSX 75W-90	ZF001097
LUKOIL LUBRICANTS EUROPE GMBH, VIENNA/AT	LUKOIL TRANSMISSION LD 80W-90	ZF010982
LUKOIL LUBRICANTS EUROPE GMBH, VIENNA/AT	LUKOIL TRANSMISSION MN 75W-90	ZF012099
LUKOIL LUBRICANTS EUROPE GMBH, VIENNA/AT	LUKOIL TRANSMISSION UNI 80W-90	ZF012150
MEGUIN GMBH & CO. KG, SAARLOUIS/DE	MEGOL HYPOID-GETRIEBEOEL TDL 80W-90	ZF001183
MEGUIN GMBH & CO. KG, SAARLOUIS/DE	MEGOL GETRIEBEOEL TRUCK-SYNTH SAE 75W-90	ZF001291
MOEVE COMMERCIAL S.A.U., MADRID/ES	CEPSA TRANSMISIONES EP 80W-90	ZF000084
MOEVE COMMERCIAL S.A.U., MADRID/ES	CEPSA TRANSMISIONES EP 85W-140	ZF000085
MOEVE COMMERCIAL S.A.U., MADRID/ES	CEPSA TRANSMISIONES EP FE+LD 75W-90	ZF000086
MOEVE COMMERCIAL S.A.U., MADRID/ES	MAN SUPER AXLE 3343 75W-90	ZF000965
MOEVE COMMERCIAL S.A.U., MADRID/ES	MAN SUPER AXLE 342-M2	ZF000966
MOL-LUB KFT, ALMASFUZITO/HU	MOL HYKOMOL ZF 80W90	ZF001118
MOL-LUB KFT, ALMASFUZITO/HU	MOL HYKOMOL TDL 75W90	ZF003365
MOTOREX AG, LANGENTHAL/CH	MOTOREX YORK PENTA TL SAE 75W/90	ZF006007
MOTOREX AG, LANGENTHAL/CH	MOTOREX_YORK UNIVERSAL CT SAE 80W/90	ZF006108
MOTOREX AG, LANGENTHAL/CH	MOTOREX YORK GEAR ZX TP SAE 80W/140	ZF007146
MOTOREX AG, LANGENTHAL/CH	MOTOREX YORK UNISYNT ZX SAE 75W90	ZF008207
MOTOREX AG, LANGENTHAL/CH	MOTOREX YORK GEAR ZX TP SAE 80W/90	ZF006006
MOTOREX AG, LANGENTHAL/CH	YORK 896 75W90	ZF000550
MOTUL SA, AUBERVILLIERS/FR	MOTUL GEAR SYNTH TDL 75W-90	ZF000825
OEL-BRACK AG, HUNZENSCHWIL/CH	MIDLAND SENSOGEAR 75W-90	ZF003680
OEST LUBRICANTS GMBH & CO.KG, FREUDENSTADT/DE	OEST SYNTH GETRIEBEÖL SAE 75W-90	ZF000491
OEST LUBRICANTS GMBH & CO.KG, FREUDENSTADT/DE	OEST GETRIEBEÖL FE SAE 80W-90 GL4/5	ZF000565
OPET FUCHS MADENI YAG SAN. VE TIC. A.S., IZMIR/TR	OTOKAR SPECTRA DO Z 80W-90	ZF004755
ORLEN OIL SP. Z O.O., KRAKOW/PL	ORLEN OIL GEAR LL 80W-90	ZF011188
ORLEN S.A., GDANSK/PL	TITANIS SUPER GL-5 80W-90	ZF001098
ORLEN S.A., GDANSK/PL	LOTOS TITANIS GL-5 80W-90	ZF005949
PAKELO MOTOR OIL S.P.A. A S.U., SAN BONIFACIO (VR)/IT	GLOBAL GEAR SA SAE 85W-140	ZF001831
PAKELO MOTOR OIL S.P.A. A S.U., SAN BONIFACIO (VR)/IT	GLOBAL MULTIGEAR TS SAE 75W/90	ZF001224
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA	TRAXON 80W-90	ZF000764
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA	TRAXON XL SYNTHETIC BLEND 80W-140	ZF002287
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA	TRAXON 80W-90	ZF003389
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA	TRAXON 85W-140	ZF003390
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA	TRAXON 80W-90	ZF011024
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA	TRAXON XL SYNTHETIC BLEND 80W-140	ZF011058
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA	TRAXON 85W-140	ZF011057
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA	TRAXON SYNTHETIC 75W-90	ZF011913
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA	TRAXON SYNTHETIC 75W-90	ZF002212
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA	TRAXON 85W-140	ZF000778
PETROGAL S.A., LISBOA/PT	GALP TRANSVEX TDL 85W140	ZF000777
PETROGAL S.A., LISBOA/PT	GALP TRANSVEX TDL 75W90	ZF000980
PETROGAL S.A., LISBOA/PT	GALP TRANSOIL HP XT 80W90	ZF001981
PETROL OFISI A.S., ISTANBUL/TR	MAXIGEAR D 75W-90	ZF001591
PETROL OFISI A.S., ISTANBUL/TR	MAXIGEAR TECH EP-X 80W-90	ZF001665
PETROL OFISI A.S., ISTANBUL/TR	MAXIGEAR EP-X 80W-90	ZF001499
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	ARBOR TRW 90 (SAE 80W-90)	ZF000007
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	ARBOR TRW 140 (SAE 85W-140)	ZF000008
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA HYPOIDE 90 (SAE 80W-90)	ZF000231
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKCELA GEAR 135H EP (SAE 80W-90)	ZF000232
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKROS GEAR EP 90 (SAE 80W-90)	ZF000233
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA HYPOIDE 140 (SAE 85W-140)	ZF000234
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKCELA GEAR 135H EP (SAE 85W-140)	ZF000235
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION W90/LA (SAE 80W-90)	ZF000516
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION X-ROAD (75W-140)	ZF000839
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION FE-AXLE (SAE 75W-90)	ZF001199
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	ARBOR TRW 90 (SAE 80W-90)	ZF001201
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION STARGEAR AX-ED (SAE 75W-90)	ZF001738
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA HYPOIDE 90 (SAE 80W-90)	ZF003638
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	PETRONAS TUTELA AXLE 700 EHD 75W-90	ZF003639
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	TUTELA TRANSMISSION W 90/LA (SAE 80W-90)	ZF003640
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	ARBOR TRW 90 (SAE 80W-90)	ZF003641

ZF approval number

AKCELA GEAR 135H EP (SAE 80W-90)
AMBRA HYPOIDE 140 (SAE 85W-140)
AKCELA GEAR 135H EP (SAE 85W-140)
ARBOR TRW 140 (SAE 85W-140)
AKROS GEAR EP 90 (SAE 80W-90)
PETRONAS TUTELA AXLE 700 EHD 75W-140
PETRONAS TUTELA AXLE 300 85W-140
PETRONAS TUTELA AXLE 300 80W-90
PETRONAS TUTELA AXLE 300 85W-140
PETRONAS TUTELA AXLE 300 80W-90
UNIGEAR GOLD 75W90
UNIGEAR GOLD 75W90
RAVENOL SLG SAE 80W-90
RAVENOL GEAR SUPER SYNTH GSS SAE 75W-90
RAVENOL GEAR TRANS SYNTH GTS SAE 75W-90
RAVENOL TDG SAE 75W-110
REPSOL CARTAGO FE LD 75W90
REPSOL CARTAGO LD 80W90
REPSOL CARTAGO LD 85W140
REPSOL NAVIGATOR FE LL 75W-90
REPSOL NAVIGATOR LL 80W-90
REPSOL NAVIGATOR LL 85W-140
ROLF TRANSMISSION S9 AGE 75W-90
ROLF TRANSMISSION M5 A 80W-90
TRANSMISSION 80W-90 GL5
SHELL SPIRAX S3 AS 80W-140
SHELL SPIRAX S3 AD 80W-90
SHELL SPIRAX S3 AM 80W-90
SHELL SPIRAX S6 AXME 75W-90
SHELL SPIRAX HD 80W- 90
SHELL SPIRAX HD 80W- 90
SHELL SPIRAX HD 80W- 90
SHELL SPIRAX S 75W-140
SHELL SPIRAX S4 AX (80W-90)
SHELL SPIRAX S4 AX (80W-90)
SHELL SPIRAX S4 AX (80W-90)
SHELL SPIRAX S6 ADME 75W- 90
SHELL SPIRAX S6 AXME 75W-140
SHELL SPIRAX S3 AX 85W-140
SHELL SPIRAX S4 AX (80W-90)
SHELL SPIRAX S3 AX 80W-90
SHELL SPIRAX S3 AX 85W-140
SHELL SPIRAX S3 AX 85W-140
SHELL SPIRAX S3 AX 85W-140
SHELL SPIRAX S3 AX 85W-140
SHELL SPIRAX S3 AX 85W-140
SHELL SPIRAX S3 AX 80W-90
SHELL SPIRAX S3 AX 80W-90
SHELL SPIRAX S3 AX 80W-90
SHELL SPIRAX S3 AX 80W-90
SHELL SPIRAX S3 AX 80W-90
GEARLUBE HG M2 SAE 80W-90
SINOPEC GREATWALL VT 75W/90
SINOPEC MULTIPURPOSE-II GEAR OIL 80W-90
SRS GETRIEBEFUID SML 80W-90
SRS GETRIEBEFUID SXL 75W-90
SRS WOLIIN HL 5 SAE 80W-90
SRS WOLIIN HL 5 SAE 85W-90
SRS WOLIIN HGAV 80W-90
SRS WOLIIN HL 5 85W-140
SWD RHEINOL SYNKROL 5 - SAE 85W140
TEDEX SUPER GEAR OIL (TDL) SAE 80W-90
TEXSA GEAR MULTI GL-5 85W140
TEXSA GEAR MULTI GL-5 90
TEXSA GEAR MULTI GL-5 80W90
MONTANA DYNAMIC TRACTOGear 5 80W90
TRAXIUM DUAL 8 FE 80W-90
TRAXIUM AXLE 7 85W-140
TRAXIUM DUAL 9 FE 75W-90
DYNATRANS HD 80W-90
TRANSSELF TYPE B 85W-140
TRAXIUM AXLE 7 80W-90
TRAXIUM AXLE 7 80W-90
TRANSSELF TYPE B 80W-90
TRAXIUM AXLE 9 80W-90
TRAXIUM AXLE 9 80W-90
TRANSSELF TYPE B 80W-90
DYNATRANS HD 80W 90
TRAXIUM AXLE 8 FE 80W-140
DYNATRANS HD 85W-140
TRANSSELF SYN FE 75W-90
TRAXIUM AXLE 7 80W-90
TRAXIUM AXLE 7 80W-90
VALVOLINE HEAVY DUTY TDL PRO 75W-90
VALVOLINE HEAVY DUTY AXLE OIL PRO 80W-90 LD
VALVOLINE HEAVY DUTY AXLE OIL PRO 75W-140
KUBOTA 80W-90 GEAR LUBRICANT HD
HOYER GEAR F-FP 75W-90
HOYER GEAR M-FS 80W-90

ZF003642
ZF003647
ZF003648
ZF003649
ZF003658
ZF003658
ZF003658
ZF003696
ZF003703
ZF009901
ZF012051
ZF001203
ZF003606
ZF005984
ZF006037
ZF006038
ZF008356
ZF000451
ZF001141
ZF001142
ZF082688
ZF008269
ZF008270
ZF003626
ZF003629
ZF006100
ZF000479
ZF001237
ZF001292
ZF001262
ZF001352
ZF001353
ZF001354
ZF001380
ZF001619
ZF001620
ZF001621
ZF003334
ZF004860
ZF008188
ZF008191
ZF008187
ZF009571
ZF009572
ZF009573
ZF009574
ZF009575
ZF009576
ZF010960
ZF010963
ZF010962
ZF010959
ZF010961
ZF005976
ZF000527
ZF003332
ZF000447
ZF001655
ZF001911
ZF001912
ZF010330
ZF011907
ZF004746
ZF001342
ZF001458
ZF001941
ZF001942
ZF003665
ZF004817
ZF006073
ZF006074
ZF008196
ZF008219
ZF008224
ZF008225
ZF008227
ZF008229
ZF008230
ZF008231
ZF008232
ZF008296
ZF008328
ZF008393
ZF011486
ZF011518
ZF001283
ZF001837
ZF001874
ZF008218
ZF011993
ZF011992

Manufacturer (05A)

WOLF OIL CORPORATION N.V., HEMIKSEM/BE
YACCO SAS, ST PIERRE LES ELBEUF/FR
ZELLER+GMELIN GMBH&CO.KG, EISLINGEN/DE
ZELLER+GMELIN GMBH&CO.KG, EISLINGEN/DE
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE

Trade name (05A)

WOLF OFFICIALTECH 75W90 GL 5
BVX 1000 75W-90
DIVINOL MULTI-AXLE 80W90
DIVINOL GETRIEBEÖL ST 80W90
ZF ECOFLUID X SAE 80W-90

ZF approval number

ZF003525
ZF009462
ZF001684
ZF012095
ZF001266

Lubricant class 05C

Transmission oil with limited-slip-additives

Viscosity grades: SAE 75W-90 / 75W-110 / 75W-140 / 80W-90 / 85W-90 / 90

Manufacturer (05C)

ADDINOL LUBE OIL GMBH, LEUNA/DE
 ADDINOL LUBE OIL GMBH, LEUNA/DE
 AVIA AG, MÜNCHEN/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
 BLASER SWISSLUBE AG, HASLE-RÜEGSAU/CH
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CHAMPION CHEMICALS N.V., HEMIKSEM/BE
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 FINKE MINERALÖLWERK GMBH, 27374 VISSELHÖVEDE/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 GS CALTEX CORPORATION, SEOUL/KR
 GS CALTEX CORPORATION, SEOUL/KR
 GULF OIL INTERNATIONAL, MUMBAI/IN
 HINDUSTAN PETROLEUM CORPORATION LTD., MUMBAI/IN
 HITACHI CONSTRUCTION MACHINERY EUROPE NV, AMSTERDAM/NL
 HUILES BERLIET S.A., SAINT-PRIEST/FR
 INA MAZIVA LTD., ZAGREB/HR
 JOHN DEERE, MOLINE, ILLINOIS/US
 KUWAIT PETROLEUM (BELGIUM) N.V., ANTWERP/BE
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE
 LIQUI MOLY GMBH, ULM/DE
 LUKOIL LUBRICANTS EUROPE GMBH, VIENNA/AT
 LUKOIL LUBRICANTS EUROPE GMBH, VIENNA/AT
 LUKOIL LUBRICANTS EUROPE GMBH, VIENNA/AT
 MEGUIN GMBH & CO. KG, SAARLOUIS/DE
 MOEVE COMMERCIAL S.A.U., MADRID/ES
 MOL-LUB KFT, ALMASFUZITO/HU
 MOTOREX AG, LANGENTHAL/CH
 MOTOREX AG, LANGENTHAL/CH
 NILS SPA, BURGSTALL/IT
 NORTHLAND PRODUCTS COMPANY, WATERLOO, IOWA/US
 OEST LUBRICANTS GMBH & CO.KG, FREUDENSTADT/DE
 OILFINO MINERALÖL GMBH, PRISDORF/DE
 ORLEN OIL SP. Z O.O., KRAKOW/PL
 ORLEN OIL SP. Z O.O., KRAKOW/PL
 ORLEN OIL SP. Z O.O., KRAKOW/PL
 ORLEN OIL SP. Z O.O., KRAKOW/PL
 ORLEN S.A., GDANSK/PL
 PAKELO MOTOR OIL S.P.A. A S.U., SAN BONIFACIO (VR)/IT
 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
 PHI OIL GMBH, ST. GEORGEN/AT
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 ROLF LUBRICANTS GMBH, LEVERKUSEN/DE
 SASOL ENERGY, JOHANNESBURG/ZA
 SAVITA OIL TECHNOLOGIES LIMITED, MUMBAI/IN
 SENNEBOGEN MASCHINENFABRIK GMBH, STEINACH/DE
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SINOPEC LUBRICANT CO., LTD., BEIJING/CN
 SK ENMOVE CO.,LTD., SEOUL/KR
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
 TOTALENERGIES LUBRIFIANTS, NANTERRE/FR
 TOTALENERGIES LUBRIFIANTS, NANTERRE/FR
 TOTALENERGIES LUBRIFIANTS, NANTERRE/FR
 TOTALENERGIES LUBRIFIANTS, NANTERRE/FR
 UNIL OPAL, SAUMUR/FR
 VALVOLINE EUROPE, DORDRECHT/NL
 WILHELM HOYER B.V. & CO. KG, VISSELHÖVEDE/DE
 WOLF OIL CORPORATION N.V., HEMIKSEM/BE
 ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE

Trade name (05C)

ADDINOL GETRIEBEÖL GH 85W-90 LS
 ADDINOL GETRIEBEÖL GH 80W-90 LS
 AVIA POWERTRAIN AX-LS 85W-90
 AVISTA PEER EVO GL5 LS SAE 90
 TECTROL MULTIGEAR LS 90
 TECTROL MULTIGEAR LS 90
 BELGEAR LS 85W90
 EVOLCA BGX 85W90
 CASTROL TRANSMAX LIMITED SLIP LL 75W-140
 CASTROL TRANSMAX LIMITED SLIP Z 85W-90
 CHAMPION OEM SPECIFIC 80W90 LS GL 5
 GEAR OIL ZF SAE 80W-90
 GEARTEX LS 80W-90
 GEARTEX LS 85W-90
 MOBILUBE LS 85W-90
 MOBILUBE LS 85W-90
 MOBIL DELVAC MODERN AXLE OIL 85W-90 LIMITED SLIP
 AVIATICON HYPOID LS 90
 FUCHS TITAN GEAR LS SAE 90
 DOOSAN LS GEAR OIL 80W90
 DEVELON LS GEAR OIL 80W90
 GULF GEAR LS 90
 HP GEAR OIL ZFL 80W 90 LS
 HITACHI GENUINE AXLE OIL ZX-W LS 80W-90
 EP 90 GL
 INA HIPENOL GTL LS 90
 JOHN DEERE GL-5 GEAR LUBRICANT W/LS ADD 80W-90
 Q8 T 45 LS SAE 90
 LIEBHERR GEAR BASIC 90 LS
 LIQUI MOLY HYPOID-GETRIEBEÖL PLUS GL 5 LS 85W-90
 LUKOIL GEAR GL-5 LS 85W-90
 LUKOIL TRANSMISSION LS 80W-90
 LUKOIL TRANSMISSION LS 85W-90
 MEGOL HYPOID-GETRIEBEOEL AXLE LS SAE 85W-90
 CEPESA AURIGA LS PLUS 80W-90
 MOL HYKOMOL LS 85W90
 MOTOREX YORK LS UNIVERSAL SAE 90
 YORK 699 LS SAE 90
 ALGOL HYPOID LS 90
 POSI-GRIP JDZF 80W90
 OEST GETRIEBEÖL HYPOID LS 90
 OILFINO VARIUS G 400LS 85W-90
 PLATINUM GEAR LS 80W-90
 PLATINUM AGRO LS 80W-90
 ORLEN OIL GEAR LS 80W-90
 ORLEN OIL AGRO LS 80W-90
 LOTOS TITANIS LS GL-5 80W-90
 UNIVERSAL GEAR EP LS SAE 85W/90
 GALP TRANSOIL HP LS 90
 MAXIGEAR EP-X 85W-90LS
 AMBRA AXF 80W-90 (SAE 80W-90)
 AKCELA AXLEPOWER (SAE 80W-90)
 TUTELA TRANSMISSION W90/LS (SAE 80W-90)
 ARBOR TTF (SAE 80W-90)
 PETRONAS AXLE 300 LS 80W-90
 SUPERGEAR BRONZE 85W90 LS
 REPSOL CARTAGO EP AUTOBLOCANTE SAE 80W90
 REPSOL NAVIGATOR LSD 80W-90
 ROLF TRANSMISSION M5 A-LS 80W-90
 SASOL DIFFERENTIAL OIL LIMITED SLIP 80W-90
 SAVSOL AUTOGEAR 90 LIMITED SLIP GL-5
 SENLUBE GEAR HYPOID LS
 SHELL SPIRAX S3 ALS 80W-90
 SHELL SPIRAX S3 ALS 85W- 90
 SINOPEC GREATWALL ZLS GL-5 85W/90
 SK ZIC G-5 LSD 80W-90
 SRS VIOLIN RSH
 ELF TRACTELF BLS 80W-90
 DYNATRANS DA 80W-90
 DYNATRANS LS 80W-90
 CLASS AGRISHIFT BLS 80W-90
 GEAR AB-EP 85W90
 VALVOLINE HEAVY DUTY AXLE OIL PRO 80W-90 LS
 HOYER GEAR M-LS 90
 WOLF OFFICIALTECH 80W90 LS GL 5
 ZF POWERFLUID GEAR LS

ZF approval number

ZF000629
 ZF000703
 ZF012107
 ZF004776
 ZF001167
 ZF012142
 ZF002257
 ZF004736
 ZF002141
 ZF002178
 ZF003555
 ZF000787
 ZF000809
 ZF000810
 ZF000031
 ZF011090
 ZF011912
 ZF002301
 ZF000651
 ZF001341
 ZF011965
 ZF000891
 ZF001578
 ZF003705
 ZF008267
 ZF000424
 ZF001312
 ZF002109
 ZF000845
 ZF001367
 ZF012151
 ZF012140
 ZF012114
 ZF001345
 ZF001050
 ZF001114
 ZF008206
 ZF008260
 ZF003447
 ZF000049
 ZF001479
 ZF000740
 ZF000603
 ZF001272
 ZF011287
 ZF011924
 ZF000924
 ZF000027
 ZF003410
 ZF001480
 ZF000546
 ZF000781
 ZF000901
 ZF001373
 ZF009452
 ZF001004
 ZF000981
 ZF008276
 ZF003625
 ZF000700
 ZF001898
 ZF008345
 ZF001303
 ZF004813
 ZF000127
 ZF003340
 ZF000442
 ZF006120
 ZF006121
 ZF006122
 ZF008173
 ZF000526
 ZF001996
 ZF011994
 ZF003552
 ZF008414

Lubricant class 05E
Universal axle and transmission oil

Manufacturer (05E)	Trade name (05E)	ZF approval number
CNH INDUSTRIAL AMERICA LLC, RACINE, WI/US	PREMIUM TRANSAXLE OIL 80W-140	ZF005941
VIBRA ENERGIA S.A., DUQUE DE CAXIAS/BR	LUBRAX UNITRACTOR 10W-30	ZF010660

Lubricant class 05F**Universal axle and transmission oil****Manufacturer (05F)**

ADDINOL LUBE OIL GMBH, LEUNA/DE
 ADDINOL LUBE OIL GMBH, LEUNA/DE
 ARGO TRACTORS S.P.A., FABBRICO RE/IT
 ARGO TRACTORS S.P.A., FABBRICO RE/IT
 ARGO TRACTORS S.P.A., FABBRICO RE/IT
 AVIA AG, MÜNCHEN/DE
 AVIA AG, MÜNCHEN/DE
 AVIA AG, MÜNCHEN/DE
 BAYWA AG MÜNCHEN, MÜNCHEN/DE
 BAYWA AG MÜNCHEN, MÜNCHEN/DE
 BELGIN MADENI YAGLAR TIC. VE SAN. A.S., KOCAELI/TR
 BELL EQUIPMENT GROUP SERVICES (PTY) LTD, RICHARDS BAY/ZA
 BLASER SWISSLUBE AG, HASLE-RÜEGSAU/CH
 BP PLC., LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CATERPILLAR, INC., MOSSVILLE/US
 CHAMPION CHEMICALS N.V., HEMIKSEM/BE
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CNH INDUSTRIAL AMERICA LLC, RACINE, WI/US
 CNH INDUSTRIAL AMERICA LLC, RACINE, WI/US
 DEUTSCHE ÖLWERKE LUBMIN, LUBMIN/DE
 ENGEN PETROLEUM (PTY) LIMITED, CAPE TOWN/ZA
 EUROL B.V., NJIVERDAL/NL
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 FINKE MINERALÖLWERK GMBH, 27374 VISSSELHÖVEDE/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 GB LUBRICANTS, GATESHEAD/GB
 GS CALTEX CORPORATION, SEOUL/KR
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 HUILES BERLIET S.A., SAINT-PIERRE/FR
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 JOHN DEERE, MOLINE, ILLINOIS/US
 KROON-OIL B.V., ALMELO/NL
 KUWAIT PETROLEUM (BELGIUM) N.V., ANTWERP/BE
 KUWAIT PETROLEUM (BELGIUM) N.V., ANTWERP/BE
 KUWAIT PETROLEUM (BELGIUM) N.V., ANTWERP/BE
 KUWAIT PETROLEUM (BELGIUM) N.V., ANTWERP/BE
 KUWAIT PETROLEUM (BELGIUM) N.V., ANTWERP/BE
 KUWAIT PETROLEUM (BELGIUM) N.V., ANTWERP/BE
 LAEMMLE CHEMICALS AG, MADETSWIL/CH
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE
 LIQUI MOLY GMBH, ULM/DE
 LIQUI MOLY GMBH, ULM/DE
 MEGUIN GMBH & CO. KG, SAARLOUIS/DE
 MEGUIN GMBH & CO. KG, SAARLOUIS/DE
 MOEVE COMMERCIAL S.A.U., MADRID/ES
 MOTOREX AG, LANGENTHAL/CH
 MOTOREX AG, LANGENTHAL/CH
 MOTOREX AG, LANGENTHAL/CH
 OPET FUCHS MADENI YAG SAN. VE TIC. A.S., IZMIR/TR
 PAKELO MOTOR OIL S.P.A. A S.U., SAN BONIFACIO (VR)/IT
 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

Trade name (05F)

ADDINOL UTTO SAE 10W-30
 ADDINOL UTTO EXTRA (SAE 20W-40)
 VELA C+ AGROLUBE
 VELA C+ LANDINI
 VELA C+ MCCORMICK
 AVIA HYDROFLUID TD
 AVIA HYDROFLUID DLZ
 AVIA POWERTRAIN UTTO-DLZ
 TECTROL UTTO-ZF
 TECTROL UTTO-HF
 BELGIN LUBEX AGROS UTTO PLUS
 BELL UTTO ULTRA
 EVOLCA UTTO 8068
 BP TRACTRAN TF-10
 CASTROL TRANSMAX AGRI TRANS PLUS 80W
 CASTROL TRANSMAX AGRI TRANS PLUS 80W
 CAT MULTIPURPOSE TRACTOR OIL
 CHAMPION U.T.T. OIL 170 BM
 1000 THF
 1000 THF
 1000 THF
 1000 THF
 1000 THF
 1000 THF
 PREMIUM TRANSAXLE OIL 20W-40
 PREMIUM TRANSAXLE OIL 20W-40
 AVENO UTTO
 ENGEN AGRIFLUID
 EUROL HYKROL JD 68
 MOBILFLUID 424
 MOBILFLUID 424
 MOBIL HYDRAUL 56
 MOBILFLUID 424
 MOBILFLUID 428
 MOBILFLUID 428
 MOBILFLUID 428
 MOBILFLUID 424
 MOBILFLUID 428 V2
 MOBILFLUID 428 V2
 MOBILFLUID 428 V2
 MOBILFLUID 428 V2
 MOBILFLUID 428 V2
 MOBILFLUID 428 V2
 MOBILFLUID 428 V2
 AVIATICON AGRA PREMIUM UTTO
 FUCHS TITAN UTTO ZF (SAE 20W-40)
 FUCHS TITAN AGRIFARM UTTO MP
 FUCHS TITAN AGRIFARM UTTO MP
 TITAN UTTO WB
 FUCHS AGRIFARM UTTO MP
 GB UNITRANS(R) ZF
 DEVELON AXLE OIL STANDARD
 GULF MPTF 10W-30
 GULF MPTF 10W-30
 EPMF
 INA TRANSHIDROL JD 50
 INA TRANSHIDROL ZF 20W-40
 INA TRANSHIDROL JD 50
 JOHN DEERE HY-GARD
 AGRIFLUID HT-PLUS
 Q8 T 2000
 JCB HP GEAR OIL PLUS
 JCB HP GEAR OIL PLUS
 JCB HP GEAR OIL PLUS
 Q8 T 2200
 Q8 TERRA 2200 UTTO
 ROXOR CONSTAR UTTO 803
 LIEBHERR GEAR MF 80W
 LIEBHERR GEAR PLUS 20W-40
 LIEBHERR GEAR MF 80W
 LIEBHERR GEAR PLUS 20W-40
 LIQUI MOLY SPECIAL UTTO
 LIQUI MOLY TRAKTORÖL UTTO
 MEGOL TRAKTORENOEL UTTO PREMIUM SAE 10W-30
 MEGOL TRAKTORENOEL UTTO
 CEPESA AURIGA TE 55 10W-30
 MOTOREX YORK FARMER POLY 604
 MOTOREX YORK FARMER POLY 304
 MOTOREX YORK UTTO CF SAE 10W30
 OPET FULLGEAR FD 80W-140
 UTTO FLUID 4 D SAE 10W-30
 GALP TRALUB 807 S
 MAXITRAK TMS OIL 500
 AMBRA MULTI G (SAE 10W-30)
 AMBRA MULTI G (SAE 10W-30)
 AMBRA MULTI G (SAE 10W-30)
 AKCELA TRANSAXLE FLUID 80W-140 (SAE 80W-140)

ZF approval number

ZF000509
 ZF001845
 ZF003719
 ZF003717
 ZF003718
 ZF001811
 ZF005975
 ZF012242
 ZF001161
 ZF002193
 ZF012190
 ZF012243
 ZF004739
 ZF000897
 ZF002188
 ZF004801
 ZF000834
 ZF011908
 ZF011782
 ZF011683
 ZF011783
 ZF011749
 ZF011650
 ZF011716
 ZF011941
 ZF011940
 ZF001687
 ZF010627
 ZF001971
 ZF000040
 ZF000060
 ZF003675
 ZF004764
 ZF005939
 ZF008221
 ZF008383
 ZF011883
 ZF011982
 ZF011970
 ZF011968
 ZF011969
 ZF011972
 ZF011983
 ZF004850
 ZF000661
 ZF002184
 ZF002183
 ZF004829
 ZF012245
 ZF000870
 ZF011963
 ZF000921
 ZF000922
 ZF008266
 ZF000400
 ZF000433
 ZF000613
 ZF001223
 ZF008247
 ZF000177
 ZF001636
 ZF002096
 ZF003538
 ZF003694
 ZF012087
 ZF009445
 ZF001856
 ZF004845
 ZF004844
 ZF006093
 ZF001368
 ZF011939
 ZF001344
 ZF011906
 ZF001200
 ZF006009
 ZF008198
 ZF008241
 ZF001866
 ZF012042
 ZF000849
 ZF001351
 ZF000544
 ZF000545
 ZF000551
 ZF000944

ZF approval number

ZF000943
ZF001184
ZF000409
ZF001461
ZF001634
ZF001838
ZF002075
ZF002092
ZF002093
ZF002139
ZF002152
ZF003443
ZF004830
ZF009459
ZF009460
ZF010231
ZF010264
ZF011000
ZF009467
ZF011937
ZF011980
ZF000958
ZF001718
ZF008204
ZF003445
ZF002229
ZF002230
ZF000707
ZF001131
ZF008341
ZF000357
ZF000358
ZF000359
ZF001295
ZF001613
ZF003325
ZF005938
ZF008286
ZF001959
ZF000105
ZF004916
ZF003380
ZF004867
ZF001346
ZF002222
ZF008262
ZF003565
ZF009470
ZF002041
ZF001366
ZF011996
ZF005951
ZF011927

Lubricant class 05G
Premium universal axle and transmission oil

Manufacturer (05G)	Trade name (05G)	ZF approval number
SINOPEC LUBRICANT CO., LTD., BEIJING/CN	SINOPEC GREATWALL HD DRIVE AXLE OIL	ZF002162
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE	ZF POWERFLUID C-PLUS (GOLD 1)	ZF002087
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE	ZF POWERFLUID PLUS	ZF005995

Lubricant class 05K

Engine oil

Viscosity grades: SAE 10W, 10W-30, 10W-40

in accordance with Specification

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

or SF/SG/SH/SJ/SL/SM

or ACEA, categories A, B, E

Note:

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

Lubricant class 05L

Automatic Transmission Fluid (ATF) based on mineral base fluids according to former Dexron IID, IIIF, IIIG or IIIH specification by General Motors.

Note:

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

Lubricant class 05M

Mineral oil-based hydraulic oil HLP in accordance with DIN 51524-2 or mineral oil-based hydraulic oil HVLP in accordance with DIN 51524-3.

Viscosity grades: ISO VG 32 / 46 / 68

Note:

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

In addition, the following trade products may be used:

Manufacturer (05M)

PANOLIN DISTRIBUTION AG, STEINHAUSEN/CH
PANOLIN DISTRIBUTION AG, STEINHAUSEN/CH
PANOLIN DISTRIBUTION AG, STEINHAUSEN/CH
SAVITA OIL TECHNOLOGIES LIMITED, MUMBAI/IN

Trade name (05M)

SHELL PANOLIN S4 HLP SYNTH 32
SHELL PANOLIN S4 HLP SYNTH 46
SHELL PANOLIN S4 HLP SYNTH 68
TATA HITACHI SUPREME P

ZF approval number

ZF012032
ZF012033
ZF012034
ZF001707

Lubricant class 05N

Transmission oil with limited-slip-additives

Viscosity grades: SAE 75W-90 / 75W-110 / 75W-140 / 80W-90 / 85W-90 / 90

Manufacturer (05N)

AVIA AG, MÜNCHEN/DE
 BAYWA AG MÜNCHEN, MÜNCHEN/DE
 CHAMPION CHEMICALS N.V., HEMIKSEM/BE
 CHAMPION CHEMICALS N.V., HEMIKSEM/BE
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 FINKE MINERALÖLWERK GMBH, 27374 VISSELHÖVEDE/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 KROON-OIL B.V., ALMELO/NL
 MORRIS LUBRICANTS, SHREWSBURY/GB
 MOTOREX AG, LANGENTHAL/CH
 PAKELO MOTOR OIL S.P.A. A S.U., SAN BONIFACIO (VR)/IT
 PHI OIL GMBH, ST. GEORGEN/AT
 ROCK OIL, WARRINGTON/GB
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
 TONGYI PETROLEUM CHEMICAL CO., LTD., BEIJING/CN
 TOTALENERGIES LUBRIFIANTS, NANTERRE/FR
 WILHELM HOYER B.V. & CO. KG, VISSELHÖVEDE/DE
 WOLF OIL CORPORATION N.V., HEMIKSEM/BE
 WOLF OIL CORPORATION N.V., HEMIKSEM/BE
 ZELLER+GMELIN GMBH&CO.KG, EISLINGEN/DE

Trade name (05N)

AVIA POWERTRAIN PLUS AX-LS 80W-90
 TECTROL MULTIGEAR LS 90 LV
 CHAMPION OEM SPECIFIC 80W-90 LS GL 5 ZF-N
 CHAMPION OEM SPECIFIC 85W-90 LS GL 5 ZF-N
 MOBIL DELVAC MODERN AXLE OIL 80W-90 LIMITED SLIP
 MOBIL DELVAC MODERN AXLE OIL 80W-90 LIMITED SLIP
 MOBIL DELVAC MODERN AXLE OIL 80W-90 LIMITED SLIP
 AVIATICON HYPOID LS PLUS 80W-90
 TITAN SUPERGEAR LS SAE 80W-90
 GEARLUBE LS 80W-90
 TERRAIN LS 80W-90
 MOTOREX YORK LS UNIVERSAL SAE 80W/90
 UNIVERSAL GEAR EP LS SAE 80W-90
 SUPERGEAR BRONZE 80W90 LS
 SD LS 80W-90
 SRS WIOLIN RSH PLUS 80W-90
 TONGYI 80W-90
 DYNATRANS DAX 80W-90
 HOYER GEAR M-LS+ 80W-90
 WOLF OFFICIALTECH 80W-90 LS GL 5 ZF-N
 WOLF OFFICIALTECH 85W-90 LS GL 5 ZF-N
 DIVINOL MULTI-AXLE LS 80W90

ZF approval number

ZF012202
 ZF009443
 ZF011947
 ZF012199
 ZF009436
 ZF010924
 ZF011990
 ZF011976
 ZF008289
 ZF009458
 ZF010985
 ZF011905
 ZF010992
 ZF012016
 ZF010297
 ZF009472
 ZF012020
 ZF009422
 ZF011995
 ZF011930
 ZF012185
 ZF010462

Lubricant class 05P

Lubricating grease for swivel bearing axles, motor grader

Manufacturer (05P)	Trade name (05P)	ZF approval number
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	SHELL AEROSHELL GREASE 22 AEROGREASE N31089	ZF012106 ZF012080

Lubricant class 05Q

Multi-purpose grease according to the specification / requirement:

- DIN 51825 classification KP2K-30 and/or
ISO 6743-9 classification ISO-L-XCCEB2 or
ISO 6743-9 classification ISO-L-XCCHB2
- Base oil: mineral or synthetic hydrocarbons (no ester)
- Thickener type: Ca, Li (simple, mixed, complex soap)
- Consistency class: NLGI 2
- EP additives
- Temperature operation limits: min. -30°C to +120°C

Note:

All commercial products that meet the above specifications/requirements may be used.

There will be no product listing.

At outside temperatures above -20°C, greases with the following classification may also be used:

DIN 51825 classification KP2K-20 and/or
ISO 6743-9 classification ISO-L-XBCEB2 or
ISO 6743-9 classification ISO-L-XBCHB2