



Industrial Technology

Eixos de tratores, transmissões para colheitadeiras e redutores finais

Lista de lubrificantes TE-ML 21

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1. Classes de lubrificantes recomendadas

Grupos de produtos	Classes de lubrificantes ⁽¹⁾	
	Primeira colocação ⁽²⁾	Colocação de serviço ⁽³⁾
Eixos APL-300, APL-700 AS-2000, AS-3000	21C	21C / 21E / 21F / 21G
TerraSteerAxle (TSA), TerraDriveAxle (TDA)	21C / 21E / 21F / 21G	21C / 21E / 21F / 21G
Kintra KC	21A / 21C / 21E / 21F / 21G	21A / 21C / 21E / 21F / 21G
Transmissões para colheitadeiras 2MD40 3MD30, 3MD35, 3MD40	21A	21A
Semi-eixos ZF (planetários de saída) para transmissões de tratores Eccom, Terramatic, Terrapower, T-7000 e S-Matic	21A / 21C / 21G	21A / 21C / 21G
Redutor final para colheitadeiras S-800, S-950, S-1050, S-1250	21A	21A

A lista de lubrificantes TE-ML 21, **versão 01.01.2021** substitui todas as versões anteriores. A respectiva lista atualizada pode ser solicitada junto a qualquer posto de serviço ZF, também podendo ser visualizada na Internet no site: www.aftermarket.zf.com/lubricants.

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

2. Intervalos para troca de óleo

2.1 Intervalo para a primeira troca de óleo

Classes de lubrificantes	21A	21C	21E / 21F / 21G
Grupos de produtos	Intervalo para a primeira troca de óleo		
Eixos APL, AS, TSA, TDA	-	1000 h	1000 h
Eixos Kintra KC	100 h	100 h	100 h
Transmissões para colheitadeiras	500 h	-	-
Semi-eixos ZF	500 h	500 h	500 h
Redutor final para colheitadeiras	500 h	-	-

2.2 Intervalo para a troca de óleo seguinte

Classes de lubrificantes	21A	21C	21E / 21F / 21G
Grupos de produtos	Intervalo para a troca de óleo seguinte		
Eixos APL, AS, TSA, TDA	-	1000 h	1500 h
Eixos Kintra KC	500 h	500 h	500 h
Transmissões para colheitadeiras	1000 h	-	-
Semi-eixos ZF	1000 h	1000 h	1000 h
Redutor final para colheitadeiras	1000 h	-	-

3. Óleos hidráulicos

Grupos de produtos	Classes de lubrificantes para colocação de serviço ⁽¹⁾	Aplicação com temperatura externa acima de
Hidráulica do freio, bloqueio hidráulico do diferencial e direção	21L	- 40°C
	Tipos de óleo conforme JDM J20D	- 40°C
	21E / 21F (Somente tipos de óleo conforme JDM J20C), 21G	- 30°C
	21K	- 30°C
	21M (ISO VG 32)	- 40°C + 20°C
	21M (ISO VG 46)	- 10°C
	21M (ISO VG 68)	- 5°C

4. Pontos de lubrificação

Grupos de produtos	Graxa lubrificante
Todos	Graxa universal à base de sabão de lítio e óleo mineral da classe NLGI 2 (especificação da graxa: KP2K-30 conforme a DIN 51825 ou ISO-L-XCCHB2 conforme a ISO 6743-9). Intervalo de lubrificação conforme as instruções de manutenção e lubrificação.

5. Explicação de notas de rodapé e observações

Notas de rodapé

- (1) **Produtos convencionais recomendados: ver páginas seguintes.**
- (2) Primeira colocação: as classes de lubrificantes indicadas são recomendadas para a primeira colocação na transmissão e para colocação durante a primeira fase de funcionamento (transmissões com quilometragem abaixo de 1.000 km).
- (3) Colocação de serviço: as classes de lubrificantes indicadas são recomendadas para a troca de óleo de serviço segundo os intervalos previstos no ponto 2.2.

Observações

Aditivos de qualquer tipo, adicionados **posteriormente** ao óleo, alteram o óleo de maneira não calculável, não sendo portanto permitido a adição dos mesmos. A ZF não assume nenhuma responsabilidade por quaisquer danos resultantes da utilização de tais aditivos.

Classe de lubrificantes 21C

Óleo de transmissão com aditivos limited slip (deslizamento limitado)

Graus de viscosidade: SAE 75W-90 / 75W-110 / 75W-140 / 80W-90 / 80W-110 / 80W-140 / 85W-90 / 85W-110 / 85W-140 / 90

Fabricante (21C)

ADDINOL LUBE OIL GMBH, LEUNA/DE
 ADDINOL LUBE OIL GMBH, LEUNA/DE
 AGCO GMBH, MARKTOBERDORF/DE
 AGCO GMBH, MARKTOBERDORF/DE
 ARAL AG, BOCHUM/DE
 ARAL AG, BOCHUM/DE
 AVIA AG, MÜNCHEN/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
 BLASER SWISSLUBE AG, HASLE-RÜEGSAU/CH
 BUCHER AG LANGENTHAL, LANGENTHAL/CH
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES
 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
 CLASS KGAA MBH, HARSEWINKEL/DE
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 FINKE MINERALÖLWERK GMBH, 27374 VISSELHÖVEDE/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GEORG OEST MINERALÖLWERK GMBH & CO.KG, FREUDENSTADT/DE
 GRUPA LOTOS S.A., GDANSK/PL
 GRUPA LOTOS S.A., GDANSK/PL
 GS CALTEX CORPORATION, SEOUL/KR
 GULF OIL INTERNATIONAL, MUMBAI/IN
 HINDUSTAN PETROLEUM CORPORATION LTD., MUMBAI/IN
 HITACHI CONSTRUCTION MACHINERY EUROPE NV, AMSTERDAM/NL
 INA MAZIVA LTD., ZAGREB/HR
 INDIAN OIL CORPORATION LTD, MUMBAI/IN
 INDIAN OIL CORPORATION LTD, MUMBAI/IN
 JOHN DEERE, MOLINE, ILLINOIS/US
 JOHN DEERE, MOLINE, ILLINOIS/US
 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
 MORRIS LUBRICANTS, SHREWSBURY/GB
 NILS SPA, BURGSTALL/IT
 NORTHLAND PRODUCTS COMPANY, WATERLOO, IOWA/US
 NORTHLAND PRODUCTS COMPANY, WATERLOO, IOWA/US
 OILFINO MINERALÖL GMBH, PRISDORF/DE
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 ORLEN OIL SP. Z O.O., KRAKOW/PL
 ORLEN OIL SP. Z O.O., KRAKOW/PL
 ORLEN OIL SP. Z O.O., KRAKOW/PL
 OY TEBOil AB, HELSINKI/FI
 PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT
 PANOLIN AG, MADETSWIL/CH
 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
 PTT OIL AND RETAIL BUSINESS PLC., BANGKOK/TH
 RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 RN-LUBRICANTS, LLC, MOSCOW/RU
 RN-LUBRICANTS, LLC, MOSCOW/RU
 ROLF LUBRICANTS GMBH, LEVERKUSEN/DE
 SASOL ENERGY, JOHANNESBURG/ZA
 SAVITA OIL TECHNOLOGIES LIMITED, MUMBAI/IN
 SAVITA OIL TECHNOLOGIES LIMITED, MUMBAI/IN

Designação do produto (21C)

ADDINOL GETRIEBEÖL GH 85W-90 LS
 ADDINOL GETRIEBEÖL GH 80W-90 LS
 VALTRA AXLE LS 85W-90
 FENDT SUPER TRANS LS 85W-90
 ARAL GETRIEBEÖL BS-LSX 75W-140
 ARAL GETRIEBEÖL HYP LS 85W-90
 AVIA HYPOID 90 LS
 PENNASOL LIMITED SLIP HYPOID GEAR OIL LS SAE 90
 AVISTA PEER EVO GL5 LS SAE 90
 TECTROL MULTIGEAR LS 90
 TECTROL MULTIGEAR LS 90
 BELGEAR LS 85W90
 EVOLCA BGX 85W90
 MOTOREX UNIVERSAL LS SAE 90
 CASTROL SYNTRAX LIMITED SLIP 75W-140
 CASTROL AXLE Z LIMITED SLIP 90
 CASTROL AXLE Z LIMITED SLIP 90
 CASTROL AXLE Z LIMITED SLIP 85W-90
 CASTROL TRANSMAX LIMITED SLIP LL 75W-140
 CASTROL TRANSMAX LIMITED SLIP Z 85W-90
 CEPSA AURIGA LS PLUS 80W-90
 CHAMPION OEM SPECIFIC 80W90 LS GL 5
 GEAR OIL ZF SAE 80W-90
 GEARTEX LS 80W-90
 GEARTEX LS 85W-90
 GEARTEX LS SAE 85W-140
 CLAAS AGRISHIFT BLS 90
 MOBILUBE LS 85W-90
 GEARLUBE VS 500
 AVIATICON HYPOID LS 90
 FUCHS TITAN GEAR LS SAE 90
 G-TRUCK LS 80W-90
 G-TRUCK LS 85W-140
 G-TRUCK LS 85W-90
 OEST GETRIEBEÖL HYPOID LS 90
 LOTOS TITANIS LS GL-5 80W-90
 LOTOS TITANIS LS GL-5 SAE 85W-140
 DOOSAN LS GEAR OIL 80W90
 GULF GEAR LS 90
 HP GEAR OIL ZFL 80W 90 LS
 HITACHI GENUINE AXLE OIL ZX-W LS 80W-90
 INA HIPENOL GTL LS 90
 SERVO GEAR SUPER LS 90
 SERVO GEAR SUPER LS 80W-90
 JOHN DEERE GL-5 GEAR LUBRICANT W/LS ADD 80W-90
 JOHN DEERE GL-5 GEAR LUBRICANT W/LS ADD 85W-140
 Q8 T 45 LS SAE 90
 LIEBHERR GEAR BASIC 90 LS
 LIQUI MOLY HYPOID-GETRIEBEÖL PLUS GL 5 LS 85W-90
 MEGOL HYPOID-GETRIEBEÖL AXLE LS SAE 85W-90
 MOL HYKOMOL LS 85W140
 MOL HYKOMOL LS 85W90
 TERRAIN LS 80W-90
 ALGOL HYPOID LS 90
 POSI-GRIP JDZF 80W90
 POSI-GRIP JDZF 85W140
 OILFINO VARIUS G 400LS 85W-90
 LUKOIL TRANSMISSION LS 80W-90
 LUKOIL TRANSMISSION LS 85W-90
 PLATINUM GEAR LS 80W-90
 PLATINUM AGRO LS 80W-90
 PLATINUM GEAR LS 85W-140
 TEBOil HYPOID LS 80W-90
 UNIVERSAL GEAR EP LS SAE 85W90
 PANOLIN SUPER DUTY LS 90
 GALP TRANSOIL HP LS 90
 MAXIGEAR EP-X 85W-90LS
 AMBRA AXF 80W-90 (SAE 80W-90)
 AKCELA AXLEPOWER (SAE 80W-90)
 AKROS AXLEGEAR 80W-90 (SAE 80W-90)
 TUTELA TRANSMISSION W90/LS (SAE 80W-90)
 ARBOR TTF (SAE 80W-90)
 SUPERGEAR BRONZE 85W90 LS
 PTT LIMITED SLIP (SAE 80W-90)
 RAVENOL SPERRDIFF.-GETR.-OEL LS 90
 REPSOL CARTAGO EP AUTOBLOCANTE SAE 80W90
 TNK TRANS GIPOID LS 80W-90
 TNK TRANS GIPOID LS 85W-90
 ROLF TRANSMISSION M5 A-LS 80W-90
 SASOL DIFFERENTIAL OIL LIMITED SLIP 80W-90
 SAVSOL AUTOGEAR 85W140 LIMITED SLIP GL5
 SAVSOL AUTOGEAR 90 LIMITED SLIP GL-5

Nº de liberação da ZF

ZF000629
 ZF000703
 ZF003466
 ZF003467
 ZF000140
 ZF000465
 ZF003689
 ZF000844
 ZF004776
 ZF001167
 ZF004895
 ZF002257
 ZF004736
 ZF000727
 ZF000269
 ZF000281
 ZF000307
 ZF002044
 ZF002141
 ZF002178
 ZF001050
 ZF003555
 ZF000787
 ZF000809
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 ZF001004
 ZF000013
 ZF001180
 ZF000981
 ZF000761
 ZF000791
 ZF003625
 ZF000700
 ZF001857
 ZF001898

Fabricante (21C)

SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SINOPEC LUBRICANT CO., LTD., BEIJING/CN
 SK LUBRICANTS, SEOUL/KR
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
 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
 VALVOLINE CUMMINS PVT LIMITED, GURGAON/IN
 VALVOLINE EUROPE, DORDRECHT/NL
 VALVOLINE EUROPE, DORDRECHT/NL
 WOLF OIL CORPORATION N.V., HEMIKSEM/BE
 YACCO SAS, ST PIERRE LES ELBEUF/FR

Designação do produto (21C)

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 WIOLIN RSH
 TOTAL DYNATRANS DA 80W-90
 TOTAL DYNATRANS DA 85W-140
 TOTAL DYNATRANS LS 80W-90
 ELF TRACTELF BLS 80W-90
 GULF LS REAR AXLE 80W-90
 TOTAL DYNATRANS DA 80W-90
 GEAR AB-EP 85W90
 GEAR DURA 80W90 LS
 VALVOLINE HEAVY DUTY AXLE OIL PRO 80W-90 LS
 NESTE AXLE LS 80W-90
 WOLF OFFICIALTECH 80W90 LS GL 5
 BVX LS 200 80W-90

Nº de liberação da ZF

ZF001303
 ZF004813
 ZF000127
 ZF003340
 ZF000442
 ZF001255
 ZF001512
 ZF001545
 ZF001546
 ZF001548
 ZF002309
 ZF000526
 ZF001465
 ZF001996
 ZF004847
 ZF003552
 ZF001614

Classe de lubrificantes 21E

Óleo universal da transmissão e do eixo

Fabricante (21E)

CNH INDUSTRIAL AMERICA LLC, RACINE, WI/US

Designação do produto (21E)

PREMIUM TRANSAXLE OIL 80W-140

Nº de liberação da ZF

ZF005941

Classe de lubrificantes 21F
Óleo universal da transmissão e do eixo

Fabricante (21F)	Designação do produto (21F)	Nº de liberação da ZF
ADDINOL LUBE OIL GMBH, LEUNA/DE	ADDINOL UTTO SAE 10W-30	ZF000509
ADDINOL LUBE OIL GMBH, LEUNA/DE	ADDINOL UTTO EXTRA (SAE 20W-40)	ZF001845
AGCO GMBH, MARKTOBERDORF/DE	VALTRA TRANSMISSION XT60	ZF003465
ARAL AG, BOCHUM/DE	ARAL FLUID HGS	ZF000457
ARGO TRACTORS S.P.A., FABBRICO RE/IT	VELA C+ LANDINI	ZF003717
ARGO TRACTORS S.P.A., FABBRICO RE/IT	VELA C+ MCCORMICK	ZF003718
ARGO TRACTORS S.P.A., FABBRICO RE/IT	VELA C+ AGROLUBE	ZF003719
AVIA AG, MÜNCHEN/DE	AVIA HYDROFLUID TD	ZF001811
AVIA AG, MÜNCHEN/DE	AVIA HYDROFLUID DLZ	ZF005975
BAYWA AG MÜNCHEN, MÜNCHEN/DE	TECTROL UTTO-ZF	ZF001161
BAYWA AG MÜNCHEN, MÜNCHEN/DE	TECTROL UTTO-HF	ZF002193
BLASER SWISSLUBE AG, HASLE-RÜEGSAU/CH	EVOLCA UTTO 8068	ZF004739
BP PLC., LONDON/GB	BP TRACTRAN TF-10	ZF000897
BUCHER AG LANGENTHAL, LANGENTHAL/CH	FARMER POLY 304	ZF000590
BUCHER AG LANGENTHAL, LANGENTHAL/CH	MOTOREX UTTO CF	ZF001158
BUCHER AG LANGENTHAL, LANGENTHAL/CH	FARMER POLY 604	ZF002207
CASTROL LTD, LONDON/GB	CASTROL AGRI TRANS PLUS 80W	ZF000759
CASTROL LTD, LONDON/GB	CASTROL AGRI TRANS PLUS 10W-30	ZF000950
CASTROL LTD, LONDON/GB	CASTROL TRANSMAX AGRI TRANS PLUS 80W	ZF002188
CASTROL LTD, LONDON/GB	CASTROL AGRI TRANS PLUS 80W	ZF004800
CASTROL LTD, LONDON/GB	CASTROL TRANSMAX AGRI TRANS PLUS 80W	ZF004801
CATERPILLAR, INC., MOSSVILLE/US	CAT MULTIPURPOSE TRACTOR OIL	ZF000834
CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES	CEPSA AURIGA TE 55 10W-30	ZF001200
CHEVRON LUBRICANTS, SAN RAMON, CA/US	CHEVRON 1000 THF	ZF000100
CLASS KGAA MBH, HARSEWINKEL/DE	CLAAS AGRISHIFT GA 12	ZF001289
DEUTSCHE ÖLWERKE LUBMIN, LUBMIN/DE	AVENO UTTO	ZF001687
EUROL B.V., NJIVERDAL/NL	EUROL HYKROL JD 68	ZF001971
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBILFLUID 424	ZF000040
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBIL HYDRAUL 56	ZF003675
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBILFLUID 424	ZF004764
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBILFLUID 428	ZF005939
FINKE MINERALÖLWERK GMBH, 27374 VISSELHÖVEDE/DE	AVIATICON AGRA PREMIUM UTTO	ZF004850
FUCHS PETROLUB SE, MANNHEIM/DE	FUCHS TITAN UTTO ZF (SAE 20W-40)	ZF000661
FUCHS PETROLUB SE, MANNHEIM/DE	FUCHS TITAN AGRIFARM UTTO MP	ZF002183
FUCHS PETROLUB SE, MANNHEIM/DE	FUCHS TITAN AGRIFARM UTTO MP	ZF002184
FUCHS PETROLUB SE, MANNHEIM/DE	TITAN UTTO WB	ZF004829
GAZPROMNEFT-LUBRICANTS, MOSCOW/RU	G-SPECIAL UTTO 10W-30	ZF002211
GAZPROMNEFT-LUBRICANTS, MOSCOW/RU	G-SPECIAL UTTO 10W-30	ZF003439
GAZPROMNEFT-LUBRICANTS, MOSCOW/RU	G-SPECIAL UTTO PREMIUM 10W-30	ZF003446
GB LUBRICANTS, GATESHEAD/GB	GB UNITRANS(R) ZF	ZF000870
GS CALTEX CORPORATION, SEOUL/KR	DOOSAN AXLE OIL STANDARD	ZF001995
GULF OIL INTERNATIONAL, MUMBAI/IN	GULF MPTF 10W-30	ZF000921
GULF OIL INTERNATIONAL, MUMBAI/IN	GULF MPTF 10W-30	ZF000922
HINDUSTAN PETROLEUM CORPORATION LTD., MUMBAI/IN	HP SUPERTRAN FM	ZF003566
HYUNDAI OILBANK CO., LTD., SEOUL/KR	XTEER THF 75W-80	ZF002219
INA MAZIVA LTD., ZAGREB/HR	INA TRANSHIDROL JD 50	ZF000400
INA MAZIVA LTD., ZAGREB/HR	INA TRANSHIDROL ZF 20W-40	ZF000433
INA MAZIVA LTD., ZAGREB/HR	INA TRANSHIDROL JD 50	ZF000613
JCB INDIA, BALLABGARH/IN	JCB REAR AXLE OIL	ZF001502
JOHN DEERE, MOLINE, ILLINOIS/US	JOHN DEERE HY-GARD	ZF001223
JXTG NIPPON OIL & ENERGY CORPORATION, TOKYO/JP	KUBOTA UDT-HD	ZF004893
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL	Q8 T 2000	ZF000177
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL	JCB HP GEAR OIL PLUS	ZF001636
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL	JCB HP GEAR OIL PLUS	ZF002096
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL	JCB HP GEAR OIL PLUS	ZF003538
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL	Q8 T 2200	ZF003694
LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE	LIEBHERR GEAR MF 80W	ZF001856
LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE	LIEBHERR GEAR MF 80W	ZF004844
LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE	LIEBHERR GEAR PLUS 20W-40	ZF004845
LIQUI MOLY GMBH, ULM/DE	LIQUI MOLY SPECIAL UTTO	ZF001368
MEGUIN GMBH & CO. KG, SAARLOUIS/DE	MEGOL TRAKTORENOEL UTTO PREMIUM SAE 10W-30	ZF001344
OOO "LLK-INTERNATIONAL", MOSCOW/RU	LUKOIL VERSO PLUS	ZF002295
OOO "LLK-INTERNATIONAL", MOSCOW/RU	LUKOIL VERSO LVX	ZF002303
OPET FUCHS MADENI YAG. SAN. VE TIC. A.S., IZMIR/TR	OPET FULLGEAR FD 80W-140	ZF001866
PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT	UTTO FLUID 4 D SAE 10W-30	ZF004769
PANOLIN AG, MADETSWIL/CH	PANOLIN JD 303	ZF000414
PANOLIN AG, MADETSWIL/CH	PANOLIN CONSTAR UTTO 803	ZF004747
PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR	LUBRAX UNITRACTOR SAE 10W-30	ZF001366
PETROGAL S.A., LISBOA/PT	GALP TRALUB 807 S	ZF000849
PETROL OFISI A.S., ISTANBUL/TR	MAXITRAK TMS OIL 500	ZF001351
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA MULTI G (SAE 10W-30)	ZF000544
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA MULTI G (SAE 10W-30)	ZF000545
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA MULTI G (SAE 10W-30)	ZF000551
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA TRX 20W-40 (SAE 20W-40)	ZF000658
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA TRX 80W-140 (SAE 80W-140)	ZF000660
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	ARBOR TRW 140 SPECIAL (SAE 80W-140)	ZF000942
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKCELA TRANSAXLE FLUID 20W-40 (SAE 20W-40)	ZF000943
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKCELA TRANSAXLE FLUID 80W-140 (SAE 80W-140)	ZF000944
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKCELA TRANSAXLE FLUID 20W-40	ZF001184
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA MULTI G (SAE 10W-30)	ZF001409
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	ARBOR MTF (SAE 10W-30)	ZF001461
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKCELA NEXPLORE (SAE 10W-30)	ZF001634
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKCELA NEXPLORE (SAE 10W-30)	ZF001838
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA MULTI G (SAE 10W-30)	ZF002075
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKCELA NEXPLORE (SAE 10W-30)	ZF002092

Fabricante (21F)

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
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PHI OIL GMBH, ST. GEORGEN/AT
 RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 ROLF LUBRICANTS GMBH, LEVERKUSEN/DE
 SAME DEUTZ FAHR, TREVIGLIO/IT
 SAME DEUTZ FAHR, TREVIGLIO/IT
 SASOL ENERGY, JOHANNESBURG/ZA
 SASOL ENERGY, JOHANNESBURG/ZA
 SAVITA OIL TECHNOLOGIES LIMITED, MUMBAI/IN
 SEANON PETROCHEMICAL CO.,LTD., LIUZHOU, GUANGXI/CN
 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
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SINOPEC LUBRICANT CO., LTD., BEIJING/CN
 SINOPEC LUBRICANT CO., LTD., BEIJING/CN
 SK LUBRICANTS, SEOUL/KR
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
 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
 VALVOLINE CUMMINS PVT LIMITED, GURGAON/IN
 VALVOLINE EUROPE, DORDRECHT/NL
 VALVOLINE EUROPE, DORDRECHT/NL
 WOLF OIL CORPORATION N.V., HEMIKSEM/BE

Designação do produto (21F)

ARBOR MTF (SAE 10W-30)
 AMBRA TRX 80W-140 (SAE 80W-140)
 AKCELA TRANSAXLE FLUID 80W-140 (SAE 80W-140)
 AMBRA TRX 20W-40 (SAE 20W-40)
 AKCELA TRANSAXLE FLUID 20W-40 (SAE 20W-40)
 AMBRA MULTI G (SAE 10W-30)
 PETRONAS AKCELA NEXPLORE (SAE 10W-30)
 GEAR OIL UTTO SILVER 10W-30
 RAVENOL GETRIEBEOEL UTTO
 REPSOL ORION UTTO
 ROLF UTTO SAE 10W-30
 SDF UTTO
 DF UTTO
 UNIVERSAL TRANSMISSION OIL 68
 SASOL UNIVERSAL TRANSMISSION OIL RS 68
 SAVSOL 315 HAT
 SEANON DEDICATED TRANSMISSION OIL 10W-30
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S6 TXME
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S4 TXM
 SINOPEC GREATWALL UTTO
 SINOPEC UTTO
 SK ZIC GL-4 ZF 80W
 SRS HYDROFLUID N
 SRS HYDROFLUID A
 TOTAL DYNATRANS MPV
 ELF TRACTELF BF 16
 TOTAL DYNATRANS LS 20W-40
 TOTAL DYNATRANS MPWB
 TOTAL DYNATRANS MPV
 ELF TRACTELF BF 16
 TOTAL DYNATRANS MPX
 UNIL OPAL FLUID G2 VARIO
 UNIL OPAL FLUID MVZ
 VALVOLINE UTF PREMIUM
 UNITRAC 80W
 NESTE GEAR UTTO
 WOLF TRACTOFLUID 170 BM

Nº de liberação da ZF

ZF002093
 ZF002138
 ZF002139
 ZF002151
 ZF002152
 ZF003443
 ZF004830
 ZF000958
 ZF001718
 ZF003445
 ZF003375
 ZF002229
 ZF002230
 ZF000707
 ZF001828
 ZF001131
 ZF001959
 ZF000357
 ZF000358
 ZF000359
 ZF001295
 ZF001613
 ZF003325
 ZF005938
 ZF000105
 ZF004916
 ZF003380
 ZF000827
 ZF004867
 ZF000540
 ZF001317
 ZF001346
 ZF001539
 ZF002098
 ZF002099
 ZF002222
 ZF003564
 ZF003565
 ZF002218
 ZF002041
 ZF003473
 ZF005951

Classe de lubrificantes 21G

Óleo premium universal da transmissão e do eixo

Fabricante (21G)

SINOPEC LUBRICANT CO., LTD., BEIJING/CN
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE

Designação do produto (21G)

SINOPEC GREATWALL HD DRIVE AXLE OIL
ZF POWERFLUID C-PLUS
ZF POWERFLUID PLUS

Nº de liberação da ZF

ZF002162
ZF002087
ZF005995

Classe de lubrificantes 21K

Óleo de motor

Grau de viscosidade SAE 10W, 10W-30, 10W-40

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

ou SF/SG/SH/SJ/SL/SM

ou categorias ACEA A/B/E

Observação:

Todos os produtos convencionais que preenchem as especificações acima podem ser utilizados. Não existe uma lista de produtos.

Classe de lubrificantes 21L

Fluido para transmissão automática (ATF) à base de óleo mineral segundo a respectiva especificação antiga Dexron

IID, IIIF, IIIG ou IIIH da General Motors.

Observação:

Todos os produtos convencionais que preenchem as especificações acima podem ser utilizados. Não existe uma lista de produtos.

Classe de lubrificantes 21M

Fluido hidráulico à base de óleo mineral HLP conforme DIN 51524-2 ou fluido hidráulico à base de óleo mineral HVLP conforme DIN 51524-3

Graus de viscosidade: ISO VG 32 / 46 / 68