



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	ZF PowerFluid Gear LS 21C / 21N	ZF PowerFluid Gear LS ZF PowerFluid Plus 21C / 21E / 21F / 21G / 21N
TerraSteerAxle (TSA), TerraDriveAxle (TDA)	ZF PowerFluid Gear LS ZF PowerFluid Plus 21C / 21E / 21F / 21G / 21N	ZF PowerFluid Gear LS ZF PowerFluid Plus 21C / 21E / 21F / 21G / 21N
Transmissões para colheitadeiras 2MD40 3MD30, 3MD35, 3MD40	21A	21A
Semi-eixos ZF (planetários de saída) para transmissões de tratores Ecom, Terramatic, Terrapower, T-7000 e S-Matic	ZF PowerFluid Gear LS ZF PowerFluid Plus 21A / 21C / 21G / 21N	ZF PowerFluid Gear LS ZF PowerFluid Plus 21A / 21C / 21G / 21N
Redutor final para colheitadeiras S-800, S-950, S-1050, S-1250	21A	21A

A lista de lubrificantes TE-ML 21, **versão 01.04.2024** 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	ZF PowerFluid Gear LS 21C / 21F / 21N	ZF PowerFluid Plus 21E / 21G
Grupos de produtos	Intervalo para a primeira troca de óleo		
Eixos APL, AS, TSA, TDA	-	1500 h ⁽⁴⁾	1500 h ⁽⁴⁾
Transmissões para colheitadeiras	500 h	-	-
Semi-eixos ZF	500 h	500 h ⁽⁴⁾	500 h ⁽⁴⁾
Redutor final para colheitadeiras	500 h	-	-

2.2 Intervalo para a troca de óleo seguinte

Classes de lubrificantes	21A	ZF PowerFluid Gear LS 21C / 21F / 21N	ZF PowerFluid Plus 21E / 21G
Grupos de produtos	Intervalo para a troca de óleo seguinte		
Eixos APL, AS, TSA, TDA	-	1500 h	3000 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.
- (4) O óleo original da ZF colocado na fábrica deve permanecer no eixo pelo menos durante as primeiras 500 horas de funcionamento; não é recomendada uma troca de óleo antecipada.

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.

6. Classes de lubrificantes e produtos convencionais recomendados**Classe de lubrificantes 21A**

Óleo de transmissão

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

Fabricante (21A)**Designação do produto (21A)****Nº de liberação da ZF**

ADDINOL LUBE OIL GMBH, LEUNA/DE	ADDINOL GETRIEBEÖL GH 85W-90	ZF000555
ADDINOL LUBE OIL GMBH, LEUNA/DE	ADDINOL GETRIEBEÖL GH 80W-90	ZF000671
ADDINOL LUBE OIL GMBH, LEUNA/DE	ADDINOL GETRIEBEÖL GX 80W-90 ML	ZF000672
ADDINOL LUBE OIL GMBH, LEUNA/DE	ADDINOL GETRIEBEÖL GH 75 W 90 SL	ZF002260
ADDINOL LUBE OIL GMBH, LEUNA/DE	ADDINOL GETRIEBEÖL GH 85 W 140	ZF003561
ADDINOL LUBE OIL GMBH, LEUNA/DE	ADDINOL GETRIEBEÖL GX 80 W 90	ZF003620
AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE	AVISTA PEER EVO GL5 SAE 80W-90	ZF004777
AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE	AVISTA PEER EVO GL4/GL5 SAE 80W-90	ZF004780
AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE	AVISTA PEER EVO GL5 SAE 85W-90	ZF004793
AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE	AVISTA PEER EVO PRIME GL4/GL5 SAE 80W-90	ZF004797
BAHRAIN PETROLEUM COMPANY, AWALI/BH	SPAREX EP 90 GL-5	ZF001693
BAHRAIN PETROLEUM COMPANY, AWALI/BH	SPAREX EP 90 GL-5	ZF002316
BAHRAIN PETROLEUM COMPANY, AWALI/BH	SPAREX EP 80W-90 GL-5	ZF002317
BAHRAIN PETROLEUM COMPANY, AWALI/BH	SPAREX EP 85W-140 GL-5	ZF002318
BASF SE, LUDWIGSHAFEN/DE	EMGARD HP 75W-90	ZF001716
BAYWA AG MÜNCHEN, MÜNCHEN/DE	TECTROL MULTIGEAR PLUS 8090	ZF001160
BAYWA AG MÜNCHEN, MÜNCHEN/DE	TECTROL MULTIGEAR HYP 90	ZF005977
BELGIN MADENI YAĞLAR TIC. VE SAN. A.S., KOCAELI/TR	BELGIN LUBEX MITRAS AX SYN ULTRA 75W-90	ZF005978
BELGIN MADENI YAĞLAR TIC. VE SAN. A.S., KOCAELI/TR	BELGIN LUBEX MITRAS AX EP MD 80W-90	ZF006035
BLASER SWISSLUBE AG, HASLE-RÜEGSAU/CH	EVOLCA SGP 75W90	ZF004734
BLASER SWISSLUBE AG, HASLE-RÜEGSAU/CH	EVOLCA BGP 80W90	ZF004735
CASTROL LTD, LONDON/GB	CASTROL AXLE EPX 90	ZF000265
CASTROL LTD, LONDON/GB	CASTROL AXLE EPX 85W-140	ZF000910
CASTROL LTD, LONDON/GB	CASTROL AXLE EPX 80W-90	ZF001320
CASTROL LTD, LONDON/GB	CASTROL AXLE EPX 80W-90	ZF001754
CASTROL LTD, LONDON/GB	CASTROL TRANSMAX AXLE LONG LIFE 75W-90	ZF002142
CASTROL LTD, LONDON/GB	CASTROL TRANSMAX UNIVERSAL LL 80W-90	ZF002143
CASTROL LTD, LONDON/GB	CASTROL TRANSMAX UNIVERSAL LL 75W-90	ZF002144
CASTROL LTD, LONDON/GB	CASTROL TRANSMAX AXLE EPX 80W-90	ZF002163
CASTROL LTD, LONDON/GB	CASTROL TRANSMAX AXLE EPX 85W-90	ZF003394
CASTROL LTD, LONDON/GB	CASTROL AXLE EPX 80W-90	ZF004752
CASTROL LTD, LONDON/GB	CASTROL TRANSMAX AXLE LONG DRAIN 80W-90	ZF004885
CASTROL LTD, LONDON/GB	CASTROL SAF-XO 75W-90	ZF006097
CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES	CEPSA TRANSMISIONES EP 80W-90	ZF000084
CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES	CEPSA TRANSMISIONES EP 85W-140	ZF000085
CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES	CEPSA TRANSMISIONES EP FE+LD 75W-90	ZF000086
CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES	CEPSA TRANSMISIONES EP 90	ZF000097
CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES	MAN SUPER AXLE 3343 75W-90	ZF000965
CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES	MAN SUPER AXLE 342-M2	ZF000966
CHAMPION CHEMICALS N.V., HEMIKSEK/BE	CHAMPION OEM SPECIFIC 75W90 GL 5	ZF003554
CHEVRON LUBRICANTS, SAN RAMON, CA/US	HYPOID LD SAE 85W-90	ZF000788
CHEVRON LUBRICANTS, SAN RAMON, CA/US	MULTIGEAR PREMIUM EP SAE 85W-140	ZF001196
CHEVRON LUBRICANTS, SAN RAMON, CA/US	MULTIGEAR EP SAE 90	ZF001243
CHEVRON LUBRICANTS, SAN RAMON, CA/US	MULTIGEAR EP-5 SAE 80W-90	ZF002137
CHEVRON LUBRICANTS, SAN RAMON, CA/US	DELO GEAR EP-5 SAE 85W-140	ZF002254
CHEVRON LUBRICANTS, SAN RAMON, CA/US	DELO GEAR EP-5 SAE 80W-90	ZF002270
CHEVRON LUBRICANTS, SAN RAMON, CA/US	DELO GEAR TDL 80W-90	ZF002273
CHEVRON LUBRICANTS, SAN RAMON, CA/US	DELO SYN-GEAR XS 75W-140	ZF002274
CHEVRON LUBRICANTS, SAN RAMON, CA/US	GEARTEX EP-5 85W-90	ZF002278
CHEVRON LUBRICANTS, SAN RAMON, CA/US	GEARTEX EP-5 80W-90	ZF002279
CHEVRON LUBRICANTS, SAN RAMON, CA/US	GEARTEX EP-5 85W-140	ZF002280
CHEVRON LUBRICANTS, SAN RAMON, CA/US	DELO SYN-TDL 75W-90	ZF003353
CHEVRON LUBRICANTS, SAN RAMON, CA/US	DELO GEAR CGA SAE 80W-90	ZF003442
CLASS KGAA MBH, HARSEWINKEL/DE	AGRISHIFT MT 80W-90	ZF008203
CLASS KGAA MBH, HARSEWINKEL/DE	AGRISHIFT MT 80W-90	ZF008233
CONDAT LUBRIFIANTS, CHASSE SUR RHONE/FR	GEAR TXS 75W90	ZF000829
CYCLON HELLAS SA, ATHENS/GR	GEAR EP GL-5 80W-90	ZF001604
DE OLIBRON BV, ZWIJNDRECHT/NL	TOR SUPER GEAR OIL 80W90	ZF000963
DE OLIBRON BV, ZWIJNDRECHT/NL	TOR UNI GEAR LD 75W90	ZF000964
DEUTSCHE ÖLWERKE LUBMIN, LUBMIN/DE	AVENO TDL ULTIMATE 75W-90	ZF010792
EKO ABEE, ATHENS/GR	EKO GEAROL-5 80W-90	ZF003351
ELLIS ENTERPRISES EAST D.O.O. KRUSEVAC, KRUŠEVAC/RS	MULTIHIPO 75W-90 SINT	ZF000653
ELLIS ENTERPRISES EAST D.O.O. KRUSEVAC, KRUŠEVAC/RS	MULTIHIPO PLUS 80W-90	ZF001086
ELLIS ENTERPRISES EAST D.O.O. KRUSEVAC, KRUŠEVAC/RS	MULTIHIPO 80W-90 F PLUS	ZF001456
ELLIS ENTERPRISES EAST D.O.O. KRUSEVAC, KRUŠEVAC/RS	MULTIHIPO 80W-140 F PLUS	ZF001749
ENI SUSTAINABLE MOBILITY S.P.A., ROME/IT	ENI ROTRA MP 80W-90	ZF000855
ENI SUSTAINABLE MOBILITY S.P.A., ROME/IT	ENI ROTRA MP 85W-140	ZF000856
ENI SUSTAINABLE MOBILITY S.P.A., ROME/IT	ENI ROTRA LSX 75W-90	ZF000860
ENI SUSTAINABLE MOBILITY S.P.A., ROME/IT	ENI ROTRA MP 75W-90	ZF003364
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBILUBE 1 SHC 75W-90	ZF000041
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBILUBE HD-A PLUS 80W-90	ZF000042
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBILUBE HD-A 85W-90	ZF000668
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBILUBE S 80W-90	ZF000776
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBIL DELVAC 1 GEAR OIL 75W-90	ZF001681
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBIL DELVAC 1 GEAR OIL 80W-140	ZF001682
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBIL DELVAC ULTRA TOTAL DRIVELINE 75W-90	ZF003699
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBIL DELVAC MODERN AXLE OIL 85W-140 V1	ZF008179
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBIL DELVAC MODERN AXLE OIL 80W-90 V1	ZF008180
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBIL DELVAC MODERN AXLE OIL 85W-140 V1	ZF008309
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBIL DELVAC MODERN AXLE OIL 85W-140 V1	ZF008310

Fabricante (21A)	Designação do produto (21A)	Nº de liberação da ZF
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 80W-90	ZF001233
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AD 80W-90	ZF001237
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S6 AXME 75W-90	ZF001262
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AM 80W-90	ZF001292
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX HD 80W- 90	ZF001352
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX HD 80W- 90	ZF001353
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX HD 80W- 90	ZF001354
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S 75W-140	ZF001380
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S4 AX (80W-90)	ZF001619
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S4 AX (80W-90)	ZF001620
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S4 AX (80W-90)	ZF001621
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S6 ADME 75W- 90	ZF003334
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S6 AXME 75W-140	ZF004860
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 80W-90	ZF008187
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 85W-140	ZF008188
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S4 AX (80W-90)	ZF008191
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 85W-140	ZF009571
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 85W-140	ZF009572
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 85W-140	ZF009573
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 85W-140	ZF009574
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 85W-140	ZF009575
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 85W-140	ZF009576
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 80W-90	ZF010959
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 80W-90	ZF010960
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 80W-90	ZF010961
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 80W-90	ZF010962
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AX 80W-90	ZF010963
SINGAPORE PETROLEUM COMPANY LIMITED, SINGAPORE/SG	GEARLUBE HG M2 SAE 80W-90	ZF005976
SINOPEC LUBRICANT CO., LTD., BEIJING/CN	SINOPEC GREATWALL VT 75W/90	ZF000527
SINOPEC LUBRICANT CO., LTD., BEIJING/CN	SINOPEC GREATWALL MULTIPURPOSE GEAR OIL 80W-90	ZF002267
SINOPEC LUBRICANT CO., LTD., BEIJING/CN	SINOPEC MULTIPURPOSE-II GEAR OIL 80W-90	ZF003332
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE	SRS WIOLIN HYPOID-GETRIEBEÖL 80W-90	ZF000441
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE	SRS WIOLIN HYPOID-GETRIEBEÖL 85W-140	ZF000443
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE	SRS WIOLIN HYPOID-GETRIEBEÖL 90	ZF000444
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE	SRS GETRIEBEFUID SML 80W-90	ZF000447
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE	SRS GETRIEBEFUID SXL 75W-90	ZF001655
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE	SRS WIOLIN HL 5 SAE 80W-90	ZF001911
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE	SRS WIOLIN HL 5 SAE 85W-90	ZF001912
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE	SRS WIOLIN HGAV 80W-90	ZF010330
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE	SRS WIOLIN HL 5 85W-140	ZF011907
SWD LUBRICANTS GMBH & CO.KG, DUISBURG/DE	SWD RHEINOL SYNKROL 5 - SAE 85W140	ZF004746
TEDEX S.A., WARSZAWA/PL	TEDEX SUPER GEAR OIL (TDL) SAE 80W-90	ZF001342
TEXSA DO BRASIL LTDA, UMUARAMA/PR/BR	TEXSA GEAR MULTI GL-5 85W140	ZF001458
TEXSA DO BRASIL LTDA, UMUARAMA/PR/BR	TEXSA GEAR MULTI GL-5 90	ZF001941
TEXSA DO BRASIL LTDA, UMUARAMA/PR/BR	TEXSA GEAR MULTI GL-5 80W90	ZF001942
TEXSA DO BRASIL LTDA, UMUARAMA/PR/BR	MONTANA DYNAMIC TRACTOGEAR 5 80W90	ZF003665
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	ELF TRANSELF TYPE B 90	ZF002069
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRAXIUM DUAL 8 FE 80W-90	ZF004817
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRAXIUM AXLE 7 85W-140	ZF006073
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRAXIUM DUAL 9 FE 75W-90	ZF006074
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	DYNATRANS HD 80W-90	ZF008196
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRAXIUM AXLE 7 85W-90	ZF008210
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRAXIUM AXLE 7 85W-90	ZF008211
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRANSELF TYPE B 85W-140	ZF008219
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRAXIUM AXLE 7 80W-90	ZF008224
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRAXIUM AXLE 7 80W-90	ZF008225
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRANSELF TYPE B 80W-90	ZF008227
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRAXIUM AXLE 9 80W-90	ZF008229
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRAXIUM AXLE 9 80W-90	ZF008230
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRANSELF TYPE B 80W-90	ZF008231
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	DYNATRANS HD 80W 90	ZF008232
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRAXIUM AXLE 8 FE 80W-140	ZF008296
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	DYNATRANS HD 85W-140	ZF008328
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	TRANSELF SYN FE 75W-90	ZF008393
UNIL OPAL, SAUMUR/FR	GEAR ZF 80W90	ZF000343
VALVOLINE EUROPE, DORDRECHT/NL	VALVOLINE HEAVY DUTY TDL PRO 75W-90	ZF001283
VALVOLINE EUROPE, DORDRECHT/NL	VALVOLINE HEAVY DUTY AXLE OIL PRO 80W-90 LD	ZF001837
VALVOLINE EUROPE, DORDRECHT/NL	VALVOLINE HEAVY DUTY AXLE OIL PRO 75W-140	ZF001874
VALVOLINE EUROPE, DORDRECHT/NL	NESTE PRO AXLE TDL 75W-90	ZF003631
VALVOLINE GLOBAL PRODUCTS, LEXINGTON/US	KUBOTA 80W-90 GEAR LUBRICANT HD	ZF008218
VIBRA ENERGIA S.A., DUQUE DE CAXIAS/BR	LUBRAX TRM 5 SAE 85W-140	ZF001474
VIBRA ENERGIA S.A., DUQUE DE CAXIAS/BR	LUBRAX TRM 5 SAE 90	ZF006105
VIBRA ENERGIA S.A., DUQUE DE CAXIAS/BR	LUBRAX TRM 5 SAE 85W-140	ZF007142
WOLF OIL CORPORATION N.V., HEMIKSEM/BE	WOLF OFFICIALTECH 75W90 GL 5	ZF003525
YACCO SAS, ST PIERRE LES ELBEUF/FR	BVX 1000 75W-90	ZF009462
ZELLER+GMELIN GMBH&CO.KG, EISLINGEN/DE	DIVINOL MULTI-AXLE 80W90	ZF001684
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE	ZF ECOFLUID X SAE 80W-90	ZF001266

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 / 85W-90 / 90

Fabricante (21C)

ADDINOL LUBE OIL GMBH, LEUNA/DE
 ADDINOL LUBE OIL GMBH, LEUNA/DE
 AGCO GMBH, MARKTOBERDORF/DE
 AGCO GMBH, MARKTOBERDORF/DE
 AVIA AG, MÜNCHEN/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/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
 CEPESA 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
 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
 GEORG OEST MINERALÖLWERK GMBH & CO.KG, FREUDENSTADT/DE
 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 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
 MORRIS LUBRICANTS, SHREWSBURY/GB
 MOTOREX AG, LANGENTHAL/CH
 MOTOREX AG, LANGENTHAL/CH
 NILS SPA, BURGSTALL/IT
 NORTHLAND PRODUCTS COMPANY, WATERLOO, IOWA/US
 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 S.A., GDANSK/PL
 OY TEBOIL AB, HELSINKI/FI
 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
 TOTAENERGIES LUBRIFIANTS, NANTERRE/FR
 TOTAENERGIES LUBRIFIANTS, NANTERRE/FR
 TOTAENERGIES LUBRIFIANTS, NANTERRE/FR
 TOTAENERGIES LUBRIFIANTS, NANTERRE/FR
 UNIL OPAL, SAUMUR/FR
 VALVOLINE EUROPE, DORDRECHT/NL
 VALVOLINE EUROPE, DORDRECHT/NL
 WOLF OIL CORPORATION N.V., HEMIKSEM/BE
 ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE

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
 AVIA HYPOID 90 LS
 AVISTA PEER EVO GL5 LS SAE 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
 CEPESA 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
 CLAAS AGRISHIFT BLS 90
 MOBILUBE LS 85W-90
 MOBILUBE LS 85W-90
 AVIATICON HYPOID LS 90
 FUCHS TITAN GEAR LS SAE 90
 OEST GETRIEBEÖL HYPOID LS 90
 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
 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
 MEGOL HYPOID-GETRIEBEÖL AXLE LS SAE 85W-90
 MOL HYKOMOL LS 85W90
 TERRAIN LS 80W-90
 MOTOREX YORK LS UNIVERSAL SAE 90
 YORK 699 LS SAE 90
 ALGOL HYPOID LS 90
 POSI-GRIP JDZF 80W90
 OILFINO VARIUS G 400LS 85W-90
 PLATINUM GEAR LS 80W-90
 PLATINUM AGRO LS 80W-90
 ORLEN OIL GEAR LS 80W-90
 LOTOS TITANIS LS GL-5 80W-90
 TEBOIL HYPOID LS 80W-90
 UNIVERSAL GEAR EP LS SAE 85W90
 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
 NESTE AXLE LS 80W-90
 WOLF OFFICIALTECH 80W90 LS GL 5
 ZF POWERFLUID GEAR LS

Nº de liberação da ZF

ZF000629
 ZF000703
 ZF003466
 ZF003467
 ZF003689
 ZF004776
 ZF001167
 ZF002257
 ZF004736
 ZF002141
 ZF002178
 ZF001050
 ZF003555
 ZF000787
 ZF000809
 ZF000810
 ZF001287
 ZF000031
 ZF011090
 ZF002301
 ZF000651
 ZF001479
 ZF001341
 ZF000891
 ZF001578
 ZF003705
 ZF008267
 ZF000424
 ZF001312
 ZF002109
 ZF000845
 ZF001367
 ZF001345
 ZF001114
 ZF001637
 ZF008206
 ZF008260
 ZF003447
 ZF000049
 ZF000740
 ZF000603
 ZF001272
 ZF011287
 ZF000924
 ZF003352
 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
 ZF004847
 ZF003552
 ZF008414

Classe de lubrificantes 21E

Óleo universal da transmissão e do eixo

Fabricante (21E)

CNH INDUSTRIAL AMERICA LLC, RACINE, WI/US
VIBRA ENERGIA S.A., DUQUE DE CAXIAS/BR

Designação do produto (21E)

PREMIUM TRANSAXLE OIL 80W-140
LUBRAX UNITRACTOR 10W-30

Nº de liberação da ZF

ZF005941
ZF010660

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
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
CASTROL LTD, LONDON/GB	CASTROL AGRI TRANS PLUS 80W	ZF000759
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
CLASS KGAA MBH, HARSEWINKEL/DE	CLAAS AGRISHIFT GA 12	ZF001289
DEUTSCHE ÖLWERKE LUBMIN, LUBMIN/DE	AVENO UTTO	ZF001687
ENEOS CORPORATION, TOKYO/JP	KUBOTA UDT-HD	ZF008321
EUROL B.V., NJIVERDAL/NL	EUROL HYKROL JD 68	ZF001971
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBILFLUID 424	ZF000040
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBILFLUID 424	ZF000060
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
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBILFLUID 428	ZF008221
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBILFLUID 428	ZF008383
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBILFLUID 424	ZF011883
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
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
HUILES BERLIET S.A., SAINT-PIERRE/FR	EPMF	ZF008266
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
JOHN DEERE, MOLINE, ILLINOIS/US	JOHN DEERE HY-GARD	ZF001223
KROON-OIL B.V., ALMELO/NL	AGRIFLUID HT-PLUS	ZF008247
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
LAEMMLE CHEMICALS AG, MADETSWIL/CH	ROXOR CONSTAR UTTO 803	ZF009445
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
LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE	LIEBHERR GEAR PLUS 20W-40	ZF006093
LIQUI MOLY GMBH, ULM/DE	LIQUI MOLY SPECIAL UTTO	ZF001368
MEGUIN GMBH & CO. KG, SAARLOUIS/DE	MEGOL TRAKTORENOEL UTTO PREMIUM SAE 10W-30	ZF001344
MEGUIN GMBH & CO. KG, SAARLOUIS/DE	MEGOL TRAKTORENOEL UTTO	ZF011906
MOTOREX AG, LANGENTHAL/CH	MOTOREX YORK FARMER POLY 604	ZF006009
MOTOREX AG, LANGENTHAL/CH	MOTOREX YORK FARMER POLY 304	ZF008198
MOTOREX AG, LANGENTHAL/CH	MOTOREX YORK UTTO CF SAE 10W30	ZF008241
OPET FUCHS MADENI YAG. SAN. VE TIC. A.S., IZMIR/TR	OPET FULLGEAR FD 80W-140	ZF001866
PAKELO MOTOR OIL S.P.A. A S.U., SAN BONIFACIO (VR)/IT	UTTO FLUID 4 D SAE 10W-30	ZF004769
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	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
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	ARBOR MTF (SAE 10W-30)	ZF002093
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA TRX 80W-140 (SAE 80W-140)	ZF002138
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKCELA TRANSAXLE FLUID 80W-140 (SAE 80W-140)	ZF002139
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA TRX 20W-40 (SAE 20W-40)	ZF002151

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
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PHI OIL GMBH, ST. GEORGEN/AT
 RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE
 RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 SAME DEUTZ FAHR, TREVIGLIO/IT
 SAME DEUTZ FAHR, TREVIGLIO/IT
 SASOL ENERGY, JOHANNESBURG/ZA
 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
 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
 SINENG PETROCHEMICAL CO.,LTD., LIUZHOU, GUANGXI/CN
 SINOPEC LUBRICANT CO., LTD., BEIJING/CN
 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
 TOTALENERGIES LUBRIFIANTS, NANTERRE/FR
 TOTALENERGIES LUBRIFIANTS, NANTERRE/FR
 UNIL OPAL, SAUMUR/FR
 UNIL OPAL, SAUMUR/FR
 VALVOLINE EUROPE, DORDRECHT/NL
 VALVOLINE EUROPE, DORDRECHT/NL
 VIBRA ENERGIA S.A., DUQUE DE CAXIAS/BR
 WOLF OIL CORPORATION N.V., HEMIKSEM/BE

Designação do produto (21F)

AKCELA TRANSAXLE FLUID 20W-40 (SAE 20W-40)
 AMBRA MULTI G (SAE 10W-30)
 PETRONAS AKCELA NEXPLOR (SAE 10W-30)
 PETRONAS TUTELA TRANSAXLE FLUID 20W-40
 PETRONAS TUTELA TRANSAXLE FLUID 80W140
 PETRONAS TUTELA TRANSAXLE FLUID 80W
 PETRONAS TUTELA TRANSAXLE FLUID 80W
 PETRONAS TUTELA TRANSAXLE FLUID 20W-40
 GEAR OIL UTTO SILVER 10W-30
 RAVENOL GETRIEBEOEL UTTO
 RAVENOL UTTO SYNTHETIC
 REPSOL ORION UTTO
 SDF UTTO
 DF UTTO
 UNIVERSAL TRANSMISSION OIL 68
 SASOL UNIVERSAL TRANSMISSION OIL RS 68
 SAVSOL 315 HAT
 SENLUBE GEAR LONGLIFE
 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
 SHELL SPIRAX S4 TXM-I
 SEANON DEDICATED TRANSMISSION OIL 10W-30
 SINOPEC GREATWALL UTTO
 SINOPEC UTTO
 SK ZIC GL-4 ZF 80W
 SRS HYDROFLUID A
 TOTAL DYNATRANS MPV
 ELF TRACTELF BF 16
 TOTAL DYNATRANS LS 20W-40
 TOTAL DYNATRANS MPWB
 TOTAL DYNATRANS MPX
 TRACTELF NG
 UNIL OPAL FLUID MVZ
 FLUID G2 VARIO
 UNITRAC 80W
 NESTE GEAR UTTO
 LUBRAX UNITRAC SAE 10W-30
 WOLF TRACTOFLUID 170 BM

Nº de liberação da ZF

ZF002152
 ZF003443
 ZF004830
 ZF009459
 ZF009460
 ZF010000
 ZF010231
 ZF010264
 ZF000958
 ZF001718
 ZF008204
 ZF003445
 ZF002229
 ZF002230
 ZF000707
 ZF001828
 ZF001131
 ZF008341
 ZF000357
 ZF000358
 ZF000359
 ZF001295
 ZF001613
 ZF003325
 ZF005938
 ZF008286
 ZF001959
 ZF000105
 ZF004916
 ZF003380
 ZF004867
 ZF000540
 ZF001317
 ZF001346
 ZF001539
 ZF002222
 ZF008262
 ZF003565
 ZF009470
 ZF002041
 ZF003473
 ZF001366
 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

Adicionalmente, podem ser usados os seguintes produtos comerciais:

Fabricante (21M)

PANOLIN DISTRIBUTION AG, MADETSWIL/CH
PANOLIN DISTRIBUTION AG, MADETSWIL/CH
PANOLIN DISTRIBUTION AG, MADETSWIL/CH

Designação do produto (21M)

PANOLIN HLP SYNTH 46
PANOLIN HLP SYNTH 68
PANOLIN HLP SYNTH 32

Nº de liberação da ZF

ZF000592
ZF002019
ZF008238

Classe de lubrificantes 21N

Óleo de transmissão com aditivos limited slip (deslizamento limitado)

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

Fabricante (21N)

BAYWA AG MÜNCHEN, MÜNCHEN/DE
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 FUCHS PETROLUB SE, MANNHEIM/DE
 KROON-OIL B.V., ALMELO/NL
 PAKELO MOTOR OIL S.P.A. A S.U., SAN BONIFACIO (VR)/IT
 ROCK OIL, WARRINGTON/GB
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
 TOTALENERGIES LUBRIFIANTS, NANTERRE/FR
 ZELLER+GMELIN GMBH&CO.KG, EISLINGEN/DE

Designação do produto (21N)

TECTROL MULTIGEAR LS 90 LV
 MOBIL DELVAC MODERN AXLE OIL 80W-90 LIMITED SLIP
 MOBIL DELVAC MODERN AXLE OIL 80W-90 LIMITED SLIP
 TITAN SUPERGEAR LS SAE 80W-90
 GEARLUBE LS 80W-90
 UNIVERSAL GEAR EP LS SAE 80W-90
 SD LS 80W-90
 SRS VIOLIN RSH PLUS 80W-90
 DYNATRANS DAX 80W-90
 DIVINOL MULTI-AXLE LS 80W90

Nº de liberação da ZF

ZF009443
 ZF009436
 ZF010924
 ZF008289
 ZF009458
 ZF010992
 ZF010297
 ZF009472
 ZF009422
 ZF010462