



## 客车和卡车的车桥及轮边

## 润滑油清单 TE-ML 12

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## 1. 客车车桥和轮边

产品组	保养注油的润滑油等级 <sup>(1)</sup>
车桥 A 系列, 轮边 RL 系列	<a href="#">ZF EcoFluid X SAE 80W-90</a> 12B / 12E / 12M / 12N
低地板门式车桥 AV 系列	<a href="#">ZF EcoFluid X SAE 80W-90</a> 12B / 12E / 12M / 12N <a href="#">ZF EcoFluid XL SAE 75W-85</a> 12F
低地板门式车桥 AV 133 带效能包	<a href="#">ZF EcoFluid XL SAE 75W-85</a> 12F
脂润滑的车轮轴承 · 前后车桥带分体轴承	12G
前后车桥轮边的轮毂轴承单元 (Hub Unit)	12H
一般润滑点	12G
一般润滑点 采用集中润滑装置润滑	12P

润滑油清单 TE-ML 12, 版本 01.01.2024 取代所有之前的版本。各最新清单可在各 ZF 售后服务点获取或通过网址 [www.aftermarket.zf.com/cn/lubricants](http://www.aftermarket.zf.com/cn/lubricants) 进行查看。

**ZF Friedrichshafen AG**  
D-88038 Friedrichshafen (腓德烈斯哈芬市)  
[www.zf.com/contact](http://www.zf.com/contact)

2. 客车电动车桥

产品组	保养注油的润滑油等级 <sup>(1)</sup>
AVE 130	<a href="#">ZF EcoFluid X SAE 80W-90</a> 12L
AVE 130 中后车桥轮边的轮毂轴承单元 (Hub Unit)	12H

3. 卡车车桥

产品组	保养注油的润滑油等级 <sup>(1)</sup>
APL 9000、APL 90	<a href="#">ZF EcoFluid X SAE 80W-90</a> 12B / 12E / 12M / 12N <a href="#">ZF EcoFluid XL SAE 75W-85</a> 12F
APL 90 前轮边的轮毂轴承单元 (Hub Unit)	12H
一般润滑点	12G

4. 油位检查、换油换脂周期、采埃孚膜片通风机维护

4.1 客车车桥及轮边（A、AV 和 RL 系列）

润滑油等级	使用条件	油位检查	换油周期和 采埃孚膜片通风机维护 <sup>(4)</sup>	换油周期和 采埃孚膜片通风机维护 <sup>(4)</sup> 高温地区使用 <sup>(3)</sup>
12B、12E	专线交通 城市交通 城郊交通 城际交通	每次更换发动机油 时	150,000 km / 3 年 <sup>(2)</sup>	60,000 km / 1 年 <sup>(2)</sup>
	用于城际交通和城郊交通的，配有采埃孚膜片通风机的 A 133 车桥		200,000 km / 3 年 <sup>(2)</sup>	100,000 km / 1 年 <sup>(2)</sup>
ZF EcoFluid X SAE 80W-90 12M、12N	专线交通 城市交通 城郊交通 城际交通		180,000 km / 3 年 <sup>(2)</sup>	120,000 km / 2 年 <sup>(2)</sup>
	用于城际交通和城郊交通的，配有采埃孚膜片通风机的 A 133 车桥		300,000 km / 3 年 <sup>(2)</sup>	200,000 km / 2 年 <sup>(2)</sup>
ZF EcoFluid XL SAE 75W-85 12F	专线交通 城市交通 城郊交通 配备低地板门式车桥 AV 系列		180,000 km / 3 年 <sup>(2)</sup>	120,000 km / 2 年 <sup>(2)</sup>
	专线交通 市内交通 长途交通 配备低地板门式车桥 AV 133，带效能包		300,000 km / 5 年 <sup>(2)</sup>	180,000 km / 3 年 <sup>(2)</sup>

润滑脂等级	使用条件	检查	更换周期
12H - 前后车桥轮边的 轮毂轴承单元 (Hub Unit)	专线交通 城郊交通	参见 ZF 操作手册	500,000 km / 4 年 <sup>(2)</sup>
	城际交通		800,000 km / 6 年 <sup>(2)</sup>
12G - 脂润滑的车轮轴承， 前后车桥带分体轴承	专线交通 城郊交通 城际交通		500,000 km / 2 年 <sup>(2)</sup>
12G - 一般润滑点	专线交通 城郊交通 城际交通		二次润滑 80,000 km / 1 年 <sup>(2)</sup>
12P - 一般润滑点 采用集中润滑装置润滑	专线交通 城郊交通 城际交通	定期检查各润滑点是否 漏油	遵守集中润滑装置制造商的 规定

4.2 客车电动车桥 (AVE 130)

润滑油等级	使用条件	油位检查	换油周期
ZF EcoFluid X SAE 80W-90 12L	专线运输	参见 ZF 操作手册	60,000 km / 1 年 <sup>(2)</sup>





润滑脂等级	使用条件	检查	更换周期
12H – AVE 130 中后车桥轮边的 轮毂轴承单元 (Hub Unit)	专线运输	参见 ZF 操作手册	500,000 km / 4 年 <sup>(2)</sup>

4.3 卡车车桥 (APL 9000、APL 90)

润滑油等级	使用条件	油位检查	换油周期
ZF EcoFluid X SAE 80W-90 12B、12E、12M、12N ZF EcoFluid XL SAE 75W-85 12F	-	每次更换发动机时	10,000 km 后首次换油 此后换油间隔 120,000 km / 2 年 <sup>(2)</sup>

润滑脂等级	使用条件	检查	更换周期
12H - APL 90 前轮边的轮毂轴承单元 (Hub Unit)	-	参见车辆制造商的规定	500,000 km / 4 年 <sup>(2)</sup>
12G - 一般润滑点	-		根据车辆制造商的规定进行二次润滑

5. 低温限值

粘度等级	在外界温度下使用	
SAE 75W-85、75W-90、75W-110、75W-140	- 40°C	
SAE 80W-90、80W-110、80W-140	- 26°C	
SAE 85W-90、85W-110、85W-140	- 12°C	
SAE 90	- 5°C	

## 6. 脚注和备注说明

### 脚注

- (1) 认可的商品- 参见下页。  
**遵守第 2 和第 3 页中关于油位检查、换油换脂周期、透气阀维护 (ZF 透气阀) 的提示。**  
同一润滑油等级内或跨润滑油等级改变油品类型时，允许与车桥中的残余油品混合。
- (2) 需要更换，以先到期为准。
- (3) “高温地区”不是针对国家，而是针对车辆使用地区。  
就 ZF 总成而言，在如下情况下，我们称其为在“高温地区使用”：  
1. 一年内有两个月以上月平均气温超过 25°C  
2. 或一年内有七天以上的温度超过 40°C  
可能的国家和地区：  
- 美洲：墨西哥、美国（南部和沙漠地区）  
- 整个非洲（南非除外）  
- 中东地区：孟加拉国、印度（地区）、巴基斯坦、阿富汗、斯里兰卡  
- 近东地区：伊朗、伊拉克、科威特、巴林、阿曼、卡塔尔、沙特阿拉伯、阿拉伯联合酋长国、也门、以色列、黎巴嫩、叙利亚、埃及、约旦  
- 澳大利亚（沙漠地区）  
- 中国（沙漠地区）
- (4) 每次更换机油时，必须更换采埃孚膜片通风机的滤网嵌套（参见 ZF 服务信息 13/16 或 11/17）

### 备注

**随后**添加到油中的任何类型的添加剂，都会以不可估计的方式使油发生变化，因此是不允许的。ZF 对因使用这些添加剂导致的任何损害不承担责任

7. 润滑油等级和认可的商品

润滑油等级 **12B**  
变速箱油  
粘度等级 : **SAE 75W-90 / 75W-110 / 75W-140**

制造商 (12B)	产品名称 (12B)	ZF 认可编号
CASTROL LTD, LONDON/GB CASTROL LTD, LONDON/GB	CASTROL TRANSMAX AXLE LONG LIFE 75W-90 CASTROL SAF-XO 75W-90	ZF002142 ZF006097

**粘度等级：80W-90 / 80W-110 / 80W-140 / 85W-90 / 85W-110 / 85W-140 / 90**

## ZF 认可编号

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
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
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 EPX 80W-90	ZF002163
CASTROL LTD, LONDON/GB	CASTROL AXLE EPX 80W-90	ZF004752
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	MAN SUPER AXLE 342-M2	ZF000966
CLASS KGAA MBH, HARSEWINKEL/DE	AGRISHIFT MT 80W-90	ZF008203
CLASS KGAA MBH, HARSEWINKEL/DE	AGRISHIFT MT 80W-90	ZF008233
CYCLON HELLAS SA, ATHENS/GR	GEAR EP GL-5 80W-90	ZF001604
EKO ABEE, ATHENS/GR	EKO GEAROL-5 80W-90	ZF003351
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
EXXONMOBIL CORPORATION, HOUSTON, TX/US	MOBIL DELVAC MODERN AXLE OIL 80W-90 HDA	ZF009835
FUCHS PETROLUB SE, MANNHEIM/DE	FUCHS TITAN SUPERGEAR SAE 80W-90	ZF000647
FUCHS PETROLUB SE, MANNHEIM/DE	FUCHS TITAN SUPERGEAR SAE 85W-140	ZF000650
FUCHS PETROLUB SE, MANNHEIM/DE	FUCHS AGRIFARM GEAR SAE 80W-90	ZF003624
FUCHS PETROLUB SE, MANNHEIM/DE	PENTOSIN GEAR SAE 80W-90	ZF004809
FUCHS PETROLUB SE, MANNHEIM/DE	PENTOSIN GEAR SAE 85W-140	ZF004810
FUCHS PETROLUB SE, MANNHEIM/DE	TITAN SUPERGEAR PLUS SAE 80W-90	ZF010958
GS CALTEX CORPORATION, SEOUL/KR	KIXX GEARTEC X GL-5 80W-90	ZF003553
HILL CORPORATION, SHYMKENT/KZ	FASTROIL MTF5 80W-90	ZF003435
HUILES BERLIET S.A., SAINT-PIERST/FR	LONGEVIA HD 80W-90	ZF008396
INGRAX INDUSTRIA E COMERCIO DE GRAXA S/A, DUQUE DE CAXIAS/BR	MULTIGEROL 85W140	ZF001630
MOL-LUB KFT, ALMASFUZITO/HU	MOL HYKOMOL ZF 80W90	ZF001118
MOOVE LUBRICANTS, GRAVESSEND/GB	COMMA PRO EP 80W-90	ZF003324
MORRIS LUBRICANTS, SHREWSBURY/GB	EP 80W-90 GEAR OIL	ZF000275
MOTOREX AG, LANGENTHAL/CH	MOTOREX YORK GEAR OIL HYPOID SAE80W/90	ZF006005
ORLEN S.A., GDANSK/PL	LOTOS TITANIS GL-5 80W-90	ZF005949
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	ARBOR TRW 90 (SAE 80W-90)	ZF001201
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA HYPOIDE 90 (SAE 80W-90)	ZF003638
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
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKCELA GEAR 135H EP (SAE 80W-90)	ZF003642
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AMBRA HYPOIDE 140 (SAE 85W-140)	ZF003647
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKCELA GEAR 135H EP (SAE 85W-140)	ZF003648
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	ARBOR TRW 140 (SAE 85W-140)	ZF003649
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	AKROS GEAR EP 90 (SAE 80W-90)	ZF003658
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	PETRONAS TUTELA AXLE 300 85W-140	ZF003696
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	PETRONAS TUTELA AXLE 300 80W-90	ZF003703
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY	PETRONAS TUTELA AXLE 300 85W-140	ZF009901
RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE	RAVENOL SLG SAE 80W-90	ZF005984
ROLF LUBRICANTS GMBH, LEVERKUSEN/DE	ROLF TRANSMISSION M5 A 80W-90	ZF003629
S.I.R.A.L., NOLA NAPOLI/IT	TRANSMISSION 80W-90 GL5	ZF006100
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB	SHELL SPIRAX S3 AS 80W-140	ZF000479
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 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
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
SWD LUBRICANTS GMBH & CO.KG, DUISBURG/DE	SWD RHEINOL SYNKROL 5 - SAE 85W140	ZF004746
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	TRAXIUM AXLE 7 85W-140	ZF006073
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	DYNATRANS HD 80W-90	ZF008196

制造商 (12E)	产品名称 (12E)	ZF 认可编号
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	TRANSELF TYPE B 80W-90	ZF008231
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	DYNATRANS HD 80W 90	ZF008232
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR	DYNATRANS HD 85W-140	ZF008328

润滑油等级 **12F**  
变速箱油  
粘度等级 : **SAE 75W-85**

**制造商 (12F)**  
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB  
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE

**产品名称 (12F)**  
SHELL SPIRAX S6 AZME 75W-85  
ZF ECOFLUID XL SAE 75W-85

**ZF 认可编号**  
ZF004894  
ZF003441



**润滑油等级 12G**

符合规格/要求的多用途润滑脂：

- DIN 51825 分级 最低 KP2K-20
- ISO 6743-9 分级 最低 ISO-L-XBCEB2
- 稠度等级：NLGI 2
- 基础油：API 1 / 2 / 3 / 4 类
- 增稠剂类型：Li
- EP 添加剂
- 温度限值：低 -20°C 至 +120°C

**提示：**

所有符合上述规格的商品均可以使用。没有产品清单。

**润滑油等级 12H**

用于轮毂轴承单元 (Hub Unit) 长期润滑的润滑脂

**制造商 (12H)**

FUCHS PETROLUB AG, MANNHEIM/DE  
FUCHS PETROLUB AG, MANNHEIM/DE  
FUCHS PETROLUB AG, MANNHEIM/DE

**产品名称 (12H)**

RENOLIT LX-PEP 2  
RENOLIT LX-N EP 2  
RENOLIT LX-NHU 2

润滑油等级 12L

变速箱油

粘度等级：SAE 75W-90 / 80W-90

制造商 (12L)

ADDINOL LUBE OIL GMBH, LEUNA/DE  
ADDINOL LUBE OIL GMBH, LEUNA/DE  
AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE  
AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE  
BAYWA AG MÜNCHEN, MÜNCHEN/DE  
BELGIN MADENI YAGLAR TIC. VE SAN. A.S., KOCAELI/TR  
BELGIN MADENI YAGLAR TIC. VE SAN. A.S., KOCAELI/TR  
BLASER SWISSLUBE AG, HASLE-RÜEGSAU/CH  
BLASER SWISSLUBE AG, HASLE-RÜEGSAU/CH  
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  
CHAMPION CHEMICALS N.V., HEMIKSEM/BE  
CHEVRON LUBRICANTS, SAN RAMON, CA/US  
CHEVRON LUBRICANTS, SAN RAMON, CA/US  
CHEVRON LUBRICANTS, SAN RAMON, CA/US  
CONDAT LUBRIFIANTS, CHASSE SUR RHONE/FR  
DE OLIEBRON BV, ZWIJNDRECHT/NL  
DEUTSCHE ÖLWERKE LUBMIN, LUBMIN/DE  
ELLIS ENTERPRISES EAST D.O.O. KRUSEVAC, KRUŠEVAC/RS  
ELLIS ENTERPRISES EAST D.O.O. KRUSEVAC, KRUŠEVAC/RS  
ENI SUSTAINABLE MOBILITY S.P.A., ROME/IT  
ENI SUSTAINABLE MOBILITY S.P.A., ROME/IT  
EXXONMOBIL CORPORATION, HOUSTON, TX/US  
EXXONMOBIL CORPORATION, HOUSTON, TX/US  
EXXONMOBIL CORPORATION, HOUSTON, TX/US  
EXXONMOBIL CORPORATION, HOUSTON, TX/US  
FINKE MINERALÖLWERK GMBH, 27374 VISSELHÖVEDE/DE  
FINKE MINERALÖLWERK GMBH, 27374 VISSELHÖVEDE/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  
FUCHS PETROLUB SE, MANNHEIM/DE  
FUCHS PETROLUB SE, MANNHEIM/DE  
FUCHS PETROLUB SE, MANNHEIM/DE  
FUCHS PETROLUB SE, MANNHEIM/DE  
GEORG OEST MINERALÖLWERK GMBH & CO.KG, FREUDENSTADT/DE  
GEORG OEST MINERALÖLWERK GMBH & CO.KG, FREUDENSTADT/DE  
GULF OIL INTERNATIONAL, MUMBAI/IN  
GULF OIL INTERNATIONAL, MUMBAI/IN  
GULF OIL INTERNATIONAL, MUMBAI/IN  
HUILES BERLIET S.A., SAINT-PRIEST/FR  
HUILES BERLIET S.A., SAINT-PRIEST/FR  
IGOL FRANCE, AMIENS/FR  
INA MAZIVA LTD., ZAGREB/HR  
INA MAZIVA LTD., ZAGREB/HR  
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE  
LIQUI MOLY GMBH, ULM/DE  
LIQUI MOLY GMBH, ULM/DE  
LUKOIL LUBRICANTS EUROPE GMBH, VIENNA/AT  
LUKOIL LUBRICANTS EUROPE GMBH, VIENNA/AT  
MEGUIN GMBH & CO. KG, SAARLOUIS/DE  
MEGUIN GMBH & CO. KG, SAARLOUIS/DE  
MOL-LUB KFT, ALMASFUZITO/HU  
MOOVE LUBRICANTS, GRAVESEND/GB  
MOTOREX AG, LANGENTHAL/CH  
MOTOREX AG, LANGENTHAL/CH  
MOTOREX AG, LANGENTHAL/CH  
MOTOREX AG, LANGENTHAL/CH  
MOTOREX AG, LANGENTHAL/CH  
MOTUL SA, AUBERVILLIERS/FR  
OEL-BRACK AG, HUNZENSCHWIL/CH  
OPET FUCHS MADENI YAG. SAN. VE TIC. A.S., IZMIR/TR  
ORLEN OIL SP. Z O.O., KRAKOW/PL  
ORLEN S.A., GDANSK/PL  
ORLEN S.A., GDANSK/PL  
OY TEBOIL AB, HELSINKI/FI  
OY TEBOIL AB, HELSINKI/FI  
PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT  
PAZ LUBRICANTS & CHEMICALS, HAIFA/IL  
PETROGAL S.A., LISBOA/PT  
PETROGAL S.A., LISBOA/PT  
PETROL OFISI A.S., ISTANBUL/TR  
PETROL OFISI A.S., ISTANBUL/TR  
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY

产品名称 (12L)

ADDINOL GETRIEBEÖL GX 80W-90 ML  
ADDINOL GETRIEBEÖL GH 75 W 90 SL  
AVISTA PEER EVO GL4/GL5 SAE 80W-90  
AVISTA PEER EVO PRIME GL4/GL5 SAE 80W-90  
TECTROL MULTIGEAR PLUS 8090  
BELGIN LUBEX MITRAS AX SYN ULTRA 75W-90  
BELGIN LUBEX MITRAS AX EP MD 80W-90  
EVOLCA SGP 75W90  
EVOLCA BGP 80W90  
CASTROL AXLE LONG DRAIN 80W-90  
CASTROL TRANSMAX UNIVERSAL LL 80W-90  
CASTROL TRANSMAX UNIVERSAL LL 75W-90  
CASTROL TRANSMAX AXLE LONG DRAIN 80W-90  
CEPSA TRANSMISIONES EP FE+LD 75W-90  
MAN SUPER AXLE 3343 75W-90  
CHAMPION OEM SPECIFIC 75W90 GL 5  
DELO GEAR TDL 80W-90  
DELO SYN-TDL 75W-90  
DELO GEAR CGA SAE 80W-90  
GEAR TXS 75W90  
TOR UNI GEAR LD 75W90  
AVENO TDL ULTIMATE 75W-90  
MULTIHIPO 75W-90 SINT  
MULTIHIPO 80W-90 F PLUS  
ENI ROTRA LSX 75W-90  
ENI ROTRA MP 75W-90  
MOBILUBE 1 SHC 75W-90  
MOBILUBE HD-A PLUS 80W-90  
MOBILUBE S 80W-90  
MOBIL DELVAC 1 GEAR OIL 75W-90  
MOBIL DELVAC ULTRA TOTAL DRIVELINE 75W-90  
AVIATICON FINKOGEAR PREMIUM 75W-90  
AVIATICON FINKOGEAR SUPER 80W-90  
FUCHS TITAN CYTRAC HSY SAE 75W-90  
FUCHS TITAN GEAR HYP LD SAE 80W-90  
FUCHS TITAN SUPERGEAR MC SAE 80W-90  
FUCHS TITAN CYTRAC RR SAE 75W-90  
GEARWAY S5 75W-90  
GEARWAY G5 80W-90  
FUCHS TITAN CYTRAC TD SAE 75W-90  
PENTOSIN GEAR PRO SAE 75W-90  
PENTOSIN GEAR ULTRA SAE 75W-90  
OEST SYNTH GETRIEBEÖL SAE 75W-90  
OEST GETRIEBEÖL FE SAE 80W-90 GL4/5  
GULF GEAR TDL 80W-90  
GULF SYNGEAR 75W-90  
GULF GEAR LD 80W-90  
LONGEVIA TC ECO 80W-90  
LONGEVIA TCX ECO 75W-90  
SYNTHEGEAR 75W-90  
INA HIPENOL TDL 80W-90  
INA HIPENOL SHD 75W-90  
Q8 TRANS XGS 75W-90  
Q8 GEAR OIL XG SAE 80W-90  
LIEBHERR SYNTOGear PLUS 75W-90  
LIQUI MOLY HYPOID GETRIEBEÖL TDL SAE 80W-90  
LIQUI MOLY VOLLSYN. HYPOID GETR.ÖL TRUCK (75W-90)  
LUKOIL TRANSMISSION SYNTH BSX 75W-90  
LUKOIL TRANSMISSION LD 80W-90  
MEGOL HYPOID-GETRIEBEOEL TDL 80W-90  
MEGOL GETRIEBEOEL TRUCK-SYNTH SAE 75W-90  
MOL HYKOMOL TDL 75W90  
COMMA PRO EP 75W-90 TDL  
YORK 896 75W90  
MOTOREX YORK GEAR ZX TP SAE 80W/90  
MOTOREX YORK PENTA TL SAE 75W/90  
MOTOREX\_YORK UNIVERSAL CT SAE 80W/90  
MOTOREX YORK UNISYNT ZX SAE 75W90  
MOTUL GEAR SYNTH TDL 75W-90  
MIDLAND SENSOGear 75W-90  
OTOKAR SPECTRA DO Z 80W-90  
PLATINUM GEAR LL 80W-90  
TITANIS SUPER GL-5 75W/90  
TITANIS SUPER GL-5 80W-90  
TEBOIL HYPOID SAE 75W-90  
TEBOIL HYPOID SAE 80W-90  
GLOBAL MULTIGEAR TS SAE 75W/90  
PAZ GEAR LD 80W-90  
GALP TRANSVEX TDL 75W90  
GALP TRANSOIL HP XT 80W90  
MAXIGEAR D 75W-90  
MAXIGEAR TECH EP-X 80W-90  
TUTELA TRANSMISSION FE-AXLE (SAE 75W-90)

ZF 认可编号

ZF000672  
ZF002260  
ZF004780  
ZF004797  
ZF001160  
ZF005978  
ZF006035  
ZF004734  
ZF004735  
ZF000229  
ZF002143  
ZF002144  
ZF004885  
ZF000086  
ZF000965  
ZF003554  
ZF002273  
ZF003353  
ZF003442  
ZF000829  
ZF000964  
ZF010792  
ZF000653  
ZF001456  
ZF000860  
ZF003364  
ZF000041  
ZF000042  
ZF000776  
ZF001681  
ZF003699  
ZF002249  
ZF002299  
ZF000642  
ZF000645  
ZF000722  
ZF000732  
ZF001030  
ZF001036  
ZF003341  
ZF004930  
ZF004931  
ZF000491  
ZF000565  
ZF000780  
ZF000863  
ZF001950  
ZF008379  
ZF008392  
ZF008361  
ZF000432  
ZF000977  
ZF000179  
ZF002103  
ZF006012  
ZF001323  
ZF001347  
ZF010972  
ZF010982  
ZF001183  
ZF001291  
ZF003365  
ZF003420  
ZF000550  
ZF006006  
ZF006007  
ZF006108  
ZF008207  
ZF000825  
ZF003680  
ZF004755  
ZF000311  
ZF000356  
ZF001098  
ZF001969  
ZF001970  
ZF001224  
ZF003437  
ZF000980  
ZF001981  
ZF001591  
ZF001665  
ZF001199

制造商 (12L)

PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY  
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY  
PHI OIL GMBH, ST. GEORGEN/AT  
PHI OIL GMBH, ST. GEORGEN/AT  
RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE  
RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE  
REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES  
REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES  
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  
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  
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE  
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE  
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE  
TEDEX S.A., WARSZAWA/PL  
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR  
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR  
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR  
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR  
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR  
VALVOLINE EUROPE, DORDRECHT/NL  
VALVOLINE EUROPE, DORDRECHT/NL  
VALVOLINE EUROPE, DORDRECHT/NL  
WOLF OIL CORPORATION N.V., HEMIKSEM/BE  
YACCO SAS, ST PIERRE LES ELBEUF/FR  
ZELLER+GMELIN GMBH&CO.KG, EISLINGEN/DE  
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE

产品名称 (12L)

TUTELA TRANSMISSION STARGEAR AX-ED (SAE 75W-90)  
PETRONAS TUTELA AXLE 700 EHD 75W-90  
UNIGEAR GOLD 75W90  
UNIGEAR GOLD 75W90  
RAVENOL GEAR SUPER SYNTH GSS SAE 75W-90  
RAVENOL GEAR TRANS SYNTH GTS SAE 75W-90  
REPSOL CARTAGO FE LD 75W90  
REPSOL CARTAGO LD 80W90  
REPSOL NAVIGATOR FE LL 75W-90  
REPSOL NAVIGATOR LL 80W-90  
ROLF TRANSMISSION S9 AGE 75W-90  
SYN GEAR DIFFERENTIAL OIL 75W-90  
SHELL SPIRAX S3 AD 80W-90  
SHELL SPIRAX S6 AXME 75W-90  
SHELL SPIRAX S3 AM 80W-90  
SHELL SPIRAX S6 ADME 75W- 90  
SINOPEC GREATWALL VT 75W/90  
SINOPEC MULTIPURPOSE-II GEAR OIL 80W-90  
SRS GETRIEBFLUID SML 80W-90  
SRS GETRIEBFLUID SXL 75W-90  
SRS WIOLIN HGAV 80W-90  
TEDEX SUPER GEAR OIL (TDL) SAE 80W-90  
TRAXIUM DUAL 8 FE 80W-90  
TRAXIUM DUAL 9 FE 75W-90  
TRAXIUM AXLE 9 80W-90  
TRAXIUM AXLE 9 80W-90  
TRANSELF SYN FE 75W-90  
VALVOLINE HEAVY DUTY TDL PRO 75W-90  
VALVOLINE HEAVY DUTY AXLE OIL PRO 80W-90 LD  
NESTE PRO AXLE TDL 75W-90  
WOLF OFFICIALTECH 75W90 GL 5  
BVX 1000 75W-90  
DIVINOL MULTI-AXLE 80W90  
ZF ECOFLUID X SAE 80W-90

ZF 认可编号

ZF001738  
ZF003639  
ZF001203  
ZF003606  
ZF006037  
ZF006038  
ZF000451  
ZF001141  
ZF008268  
ZF008269  
ZF003626  
ZF000702  
ZF001237  
ZF001262  
ZF001292  
ZF003334  
ZF000527  
ZF003332  
ZF000447  
ZF001655  
ZF010330  
ZF001342  
ZF004817  
ZF006074  
ZF008229  
ZF008230  
ZF008393  
ZF001283  
ZF001837  
ZF003631  
ZF003525  
ZF009462  
ZF001684  
ZF001266

润滑油等级 12M

变速箱油

粘度等级：80W-90 / 80W-110 / 80W-140 / 85W-90 / 85W-110 / 85W-140 / 90

制造商 (12M)

ADDINOL LUBE OIL GMBH, LEUNA/DE  
AVISTA OIL DEUTSCHLAND GMBH, UETZE/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  
CASTROL LTD, LONDON/GB  
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  
ELLIS ENTERPRISES EAST D.O.O. KRUSEVAC, KRUŠEVAC/RS  
ELLIS ENTERPRISES EAST D.O.O. KRUSEVAC, KRUŠEVAC/RS  
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 VISSELHÖVEDE/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  
GEORG OEST MINERALÖLWERK GMBH & CO.KG, FREUDENSTADT/DE  
GULF OIL INTERNATIONAL, MUMBAI/IN  
GULF OIL INTERNATIONAL, MUMBAI/IN  
HUILES BERLIET S.A., SAINT-PRIEST/FR  
INA MAZIVA LTD., ZAGREB/HR  
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
LIQUI MOLY GMBH, ULM/DE  
LUKOIL LUBRICANTS EUROPE GMBH, VIENNA/AT  
MEGUIN GMBH & CO. KG, SAARLOUIS/DE  
MOTOREX AG, LANGENTHAL/CH  
MOTOREX AG, LANGENTHAL/CH  
MOTOREX AG, LANGENTHAL/CH  
OPET FUCHS MADENI YAG. SAN. VE TIC. A.S., IZMIR/TR  
ORLEN OIL SP. Z O.O., KRAKOW/PL  
ORLEN S.A., GDANSK/PL  
ORLEN S.A., GDANSK/PL  
OY TEBOIL AB, HELSINKI/FI  
OY TEBOIL AB, HELSINKI/FI  
PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT  
PAZ LUBRICANTS & CHEMICALS, HAIFA/IL  
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA  
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA  
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA  
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA  
PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA  
PETROGAL S.A., LISBOA/PT  
PETROGAL S.A., LISBOA/PT  
PETROL OFISI A.S., ISTANBUL/TR  
REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES  
REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES  
REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES  
REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES  
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  
SINOPEC LUBRICANT CO., LTD., BEIJING/CN  
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE  
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE  
TEDEX S.A., WARSZAWA/PL  
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR  
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR  
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR  
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR

产品名称 (12M)

ADDINOL GETRIEBEÖL GX 80W-90 ML  
AVISTA PEER EVO GL4/GL5 SAE 80W-90  
AVISTA PEER EVO PRIME GL4/GL5 SAE 80W-90  
TECTROL MULTIGEAR PLUS 8090  
BELGIN LUBEX MITRAS AX EP MD 80W-90  
EVLCA BGP 80W90  
CASTROL AXLE LONG DRAIN 80W-90  
CASTROL TRANSMAX UNIVERSAL LL 80W-90  
CASTROL TRANSMAX AXLE LONG DRAIN 80W-90  
MULTIGEAR PREMIUM EP SAE 85W-140  
MULTIGEAR EP-5 SAE 80W-90  
DELO GEAR EP-5 SAE 85W-140  
DELO GEAR EP-5 SAE 80W-90  
DELO GEAR TDL 80W-90  
DELO GEAR CGA SAE 80W-90  
MULTIHIPO 80W-90 F PLUS  
MULTIHIPO 80W-140 F PLUS  
MOBILUBE HD-A PLUS 80W-90  
MOBILUBE S 80W-90  
MOBIL DELVAC 1 GEAR OIL 80W-140  
MOBIL DELVAC MODERN AXLE OIL 85W-140 V1  
MOBIL DELVAC MODERN AXLE OIL 80W-90 V1  
MOBIL DELVAC MODERN AXLE OIL 85W-140 V1  
MOBIL DELVAC MODERN AXLE OIL 85W-140 V1  
MOBIL DELVAC MODERN AXLE OIL 80W-90 V1  
AVIATICON FINKOGEAR SUPER 80W-90  
FUCHS TITAN GEAR HYP LD SAE 80W-90  
FUCHS TITAN SUPERGEAR MC SAE 80W-90  
GEARWAY G5 80W-90  
PENTOSIN GETRIEBEÖL O-226 80W-90  
FUCHS TITAN SUPERGEAR SAE 85W-110  
TITAN SUPERGEAR MC SAE 80W-140  
OEST GETRIEBEÖL FE SAE 80W-90 GL4/5  
GULF GEAR TDL 80W-90  
GULF GEAR LD 80W-90  
LONGEVIA TC ECO 80W-90  
INA HIPENOL TDL 80W-90  
Q8 AXLE OIL XG SAE 80W-140  
Q8 GEAR OIL XG SAE 80W-90  
Q8 SYNTHETIC GEAR OIL SAE 80W-140  
LIQUI MOLY HYPOID GETRIEBEÖL TDL SAE 80W-90  
LUKOIL TRANSMISSION LD 80W-90  
MEGOL HYPOID-GETRIEBEOEL TDL 80W-90  
MOTOREX YORK GEAR ZX TP SAE 80W/90  
MOTOREX\_YORK UNIVERSAL CT SAE 80W/90  
MOTOREX YORK GEAR ZX TP SAE 80W/140  
OTOKAR SPECTRA DO Z 80W-90  
PLATINUM GEAR LL 80W-90  
TITANIS SUPER GL-5 80W/140  
TITANIS SUPER GL-5 80W-90  
TEBOIL HYPOID SAE 80W-90  
TEBOIL HYPOID SAE 80W-140  
GLOBAL GEAR SA SAE 85W-140  
PAZ GEAR LD 80W-90  
TRAXON 80W-90  
TRAXON 85W-140  
TRAXON XL SYNTHETIC BLEND 80W-140  
TRAXON 80W-90  
TRAXON 85W-140  
GALP TRANSVEX TDL 85W140  
GALP TRANSOIL HP XT 80W90  
MAXIGEAR TECH EP-X 80W-90  
REPSOL CARTAGO LD 80W90  
REPSOL CARTAGO LD 85W140  
REPSOL NAVIGATOR LL 80W-90  
REPSOL NAVIGATOR LL 85W-140  
SHELL SPIRAX S3 AD 80W-90  
SHELL SPIRAX S3 AM 80W-90  
SHELL SPIRAX HD 80W- 90  
SHELL SPIRAX HD 80W- 90  
SHELL SPIRAX HD 80W- 90  
SHELL SPIRAX S4 AX (80W-90)  
SHELL SPIRAX S4 AX (80W-90)  
SHELL SPIRAX S4 AX (80W-90)  
SHELL SPIRAX S4 AX (80W-90)  
SINOPEC MULTIPURPOSE-II GEAR OIL 80W-90  
SRS GETRIEBEFLUID SML 80W-90  
SRS WILIN HGAV 80W-90  
TEDEX SUPER GEAR OIL (TDL) SAE 80W-90  
TRAXIUM DUAL 8 FE 80W-90  
TRAXIUM AXLE 9 80W-90  
TRAXIUM AXLE 9 80W-90  
TRAXIUM AXLE 8 FE 80W-140

ZF 认可编号

ZF000672  
ZF004780  
ZF004797  
ZF001160  
ZF006035  
ZF004735  
ZF000229  
ZF002143  
ZF004885  
ZF001196  
ZF002137  
ZF002254  
ZF002270  
ZF002273  
ZF003442  
ZF001456  
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ZF008310  
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ZF002299  
ZF000645  
ZF000722  
ZF001036  
ZF001195  
ZF004921  
ZF006028  
ZF000565  
ZF000780  
ZF001950  
ZF008379  
ZF000432  
ZF002102  
ZF002103  
ZF002105  
ZF001323  
ZF010982  
ZF001183  
ZF006006  
ZF006108  
ZF007146  
ZF004755  
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ZF000353  
ZF001098  
ZF001970  
ZF002039  
ZF001831  
ZF003437  
ZF000764  
ZF000778  
ZF002287  
ZF003389  
ZF003390  
ZF000777  
ZF001981  
ZF001665  
ZF001141  
ZF001142  
ZF008269  
ZF008270  
ZF001237  
ZF001292  
ZF001352  
ZF001353  
ZF001354  
ZF001619  
ZF001620  
ZF001621  
ZF008191  
ZF003332  
ZF000447  
ZF010330  
ZF001342  
ZF004817  
ZF008229  
ZF008230  
ZF008296

制造商 (12M)	产品名称 (12M)	ZF 认可编号
VALVOLINE EUROPE, DORDRECHT/NL	VALVOLINE HEAVY DUTY AXLE OIL PRO 80W-90 LD	ZF001837
VALVOLINE GLOBAL PRODUCTS, LEXINGTON/US	KUBOTA 80W-90 GEAR LUBRICANT HD	ZF008218
ZELLER+GMELIN GMBH&CO.KG, EISLINGEN/DE	DIVINOL MULTI-AXLE 80W90	ZF001684
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE	ZF ECOFLUID X SAE 80W-90	ZF001266

润滑油等级 12N

变速箱油

粘度等级：SAE 75W-90 / 75W-110 / 75W-140

制造商 (12N)

ADDINOL LUBE OIL GMBH, LEUNA/DE  
BASF SE, LUDWIGSHAFEN/DE  
BELGIN MADENI YAGLAR TIC. VE SAN. A.S., KOCAELI/TR  
BLASER SWISSLUBE AG, HASLE-RÜEGSAU/CH  
CASTROL LTD, LONDON/GB  
CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES  
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  
CONDAT LUBRIFIANTS, CHASSE SUR RHONE/FR  
DE OLIEBRON BV, ZWIJNDRECHT/NL  
DEUTSCHE ÖLWERKE LUBMIN, LUBMIN/DE  
ELLIS ENTERPRISES EAST D.O.O. KRUSEVAC, KRUŠEVAC/RS  
ENI SUSTAINABLE MOBILITY S.P.A., ROME/IT  
ENI SUSTAINABLE MOBILITY S.P.A., ROME/IT  
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  
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  
GEORG OEST MINERALÖLWERK GMBH & CO.KG, FREUDENSTADT/DE  
GULF OIL INTERNATIONAL, MUMBAI/IN  
HUILES BERLIET S.A., SAINT-PRIEST/FR  
IGOL FRANCE, AMIENS/FR  
INA MAZIVA LTD., ZAGREB/HR  
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
LIEBHERR HYDRAULIKBÄGGER GMBH, KIRCHDORF/DE  
LIQUI MOLY GMBH, ULM/DE  
LUKOIL LUBRICANTS EUROPE GMBH, VIENNA/AT  
MEGUIN GMBH & CO. KG, SAARLOUIS/DE  
MOL-LUB KFT, ALMASFUZITO/HU  
MOOVE LUBRICANTS, GRAVESEND/GB  
MOTOREX AG, LANGENTHAL/CH  
MOTOREX AG, LANGENTHAL/CH  
MOTOREX AG, LANGENTHAL/CH  
MOTUL SA, AUBERVILLIERS/FR  
OEL-BRACK AG, HUNZENSCHWIL/CH  
ORLEN S.A., GDANSK/PL  
OY TEBOIL AB, HELSINKI/FI  
PAKELO MOTOR OIL, 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  
PHI OIL GMBH, ST. GEORGEN/AT  
RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE  
RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE  
RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE  
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  
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  
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE  
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR  
TOTALENERGIES LUBRIFIANTS, NANTERRE/FR  
VALVOLINE EUROPE, DORDRECHT/NL  
VALVOLINE EUROPE, DORDRECHT/NL  
VALVOLINE EUROPE, DORDRECHT/NL  
WOLF OIL CORPORATION N.V., HEMIKSEM/BE  
YACCO SAS, ST PIERRE LES ELBEUF/FR

产品名称 (12N)

ADDINOL GETRIEBEÖL GH 75 W 90 SL  
EMGARD HP 75W-90  
BELGIN LUBEX MITRAS AX SYN ULTRA 75W-90  
EVOLCA SGP 75W90  
CASTROL TRANSMAX UNIVERSAL LL 75W-90  
CEPSA TRANSMISIONES EP FE+LD 75W-90  
MAN SUPER AXLE 3343 75W-90  
CHAMPION OEM SPECIFIC 75W90 GL 5  
DELO SYN-GEAR XS 75W-140  
DELO SYN-TDL 75W-90  
GEAR TXS 75W90  
TOR UNI GEAR LD 75W90  
AVENO TDL ULTIMATE 75W-90  
MULTIHIPO 75W-90 SINT  
ENI ROTRA LSX 75W-90  
ENI ROTRA MP 75W-90  
MOBILUBE 1 SHC 75W-90  
MOBIL DELVAC 1 GEAR OIL 75W-90  
MOBIL DELVAC ULTRA TOTAL DRIVELINE 75W-90  
AVIATICON FINKOGEAR PREMIUM 75W-90  
FUCHS TITAN CYTRAC HSY SAE 75W-90  
FUCHS TITAN CYTRAC RR SAE 75W-90  
GEARWAY S5 75W-90  
FUCHS TITAN CYTRAC TD SAE 75W-90  
PENTOSIN GEAR PRO SAE 75W-90  
PENTOSIN GEAR ULTRA SAE 75W-90  
OEST SYNTH GETRIEBEÖL SAE 75W-90  
GULF SYNGEAR 75W-90  
LONGEVIA TCX ECO 75W-90  
SYNTHEGEAR 75W-90  
INA HIPENOL SHD 75W-90  
Q8 TRANS XGS 75W-90  
Q8 TRANS XGR 75W-140  
LIEBHERR SYNTOGear PLUS 75W-90  
LIQUI MOLY VOLL SYN. HYPOID GETR.ÖL TRUCK (75W-90)  
LUKOIL TRANSMISSION SYNTH BSX 75W-90  
MEGOL GETRIEBEOEL TRUCK-SYNTH SAE 75W-90  
MOL HYKOMOL TDL 75W90  
COMMA PRO EP 75W-90 TDL  
YORK 896 75W90  
MOTOREX YORK PENTA TL SAE 75W/90  
MOTOREX YORK UNISYNT ZX SAE 75W90  
MOTUL GEAR SYNTH TDL 75W-90  
MIDLAND SENSOGear 75W-90  
TITANIS SUPER GL-5 75W/90  
TEBOIL HYPOID SAE 75W-90  
GLOBAL MULTIGEAR TS SAE 75W/90  
GALP TRANSVEX TDL 75W90  
MAXIGEAR D 75W-90  
TUTELA TRANSMISSION X-ROAD (75W-140)  
TUTELA TRANSMISSION FE-AXLE (SAE 75W-90)  
TUTELA TRANSMISSION STARGEAR AX-ED (SAE 75W-90)  
PETRONAS TUTELA AXLE 700 EHD 75W-90  
PETRONAS TUTELA AXLE 700 EHD 75W-140  
UNIGEAR GOLD 75W90  
UNIGEAR GOLD 75W90  
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 NAVIGATOR FE LL 75W-90  
ROLF TRANSMISSION S9 AGE 75W-90  
SYN GEAR DIFFERENTIAL OIL 75W-90  
SHELL SPIRAX S6 AXME 75W-90  
SHELL SPIRAX S 75W-140  
SHELL SPIRAX S6 ADME 75W- 90  
SHELL SPIRAX S6 AXME 75W-140  
SINOPEC GREATWALL VT 75W/90  
SRS GETRIEBEFLUID SXL 75W-90  
TRAXIUM DUAL 9 FE 75W-90  
TRANSELF SYN FE 75W-90  
VALVOLINE HEAVY DUTY TDL PRO 75W-90  
VALVOLINE HEAVY DUTY AXLE OIL PRO 75W-140  
NESTE PRO AXLE TDL 75W-90  
WOLF OFFICIALTECH 75W90 GL 5  
BVX 1000 75W-90

ZF 认可编号

ZF002260  
ZF001716  
ZF005978  
ZF004734  
ZF002144  
ZF000086  
ZF000965  
ZF003554  
ZF002274  
ZF003353  
ZF000829  
ZF000964  
ZF010792  
ZF000653  
ZF000860  
ZF003364  
ZF000041  
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ZF003699  
ZF002249  
ZF000642  
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ZF001969  
ZF001224  
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ZF000839  
ZF001199  
ZF001738  
ZF003639  
ZF003685  
ZF001203  
ZF003606  
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ZF006038  
ZF008351  
ZF000451  
ZF008268  
ZF003626  
ZF000702  
ZF001262  
ZF001380  
ZF003334  
ZF004860  
ZF000527  
ZF001655  
ZF006074  
ZF008393  
ZF001283  
ZF001874  
ZF003631  
ZF003525  
ZF009462

**润滑油等级 12P**

符合规格/要求的润滑脂：

- DIN 51502 分级 最低 GP 0/00/000 G -30
- ISO 6743-9 分级 最低 ISO-L-X C C E/F/H/I B 0/00/000
- 稠度等级：NLGI 0 / 00 / 000
- 基础油：API 1 / 2 / 3 / 4 类
- 增稠剂类型：Li / Ca
- EP 添加剂
- 集中润滑装置制造商必须批准允许用于所用设备。

**提示：**

- 所有符合上述规格/要求的商品均可以使用。
- 设备或车辆运营单位应确保润滑点有定期可靠的润滑剂供给。
- 系统或车辆运营单位应确保润滑点不会出现润滑脂供应不足的情况（通过设备自动发出的报错，并定期进行目视检查）。
- 必须遵守设备制造商关于漏脂检查和更换周期的规定。