

## PRODUTO: TEXSA GEAR MULTI GL-5

Aprovado pela ZF Friedrichshafen AG nas viscosidades

SAE 90, 80W-90 e 85W-140

O TEXSA GEAR MULTI GL-5 é um lubrificante de base mineral produzido em vários graus de viscosidade SAE, para atender uma grande gama de aplicações dos principais fabricantes de caixas de engrenagens de veículos leves a gasolina, veículos diesel, leve e pesados de caminhões e ônibus, em atendimento as suas especificações, inclusive de máquinas agrícolas, tratores e similares.

Foi principalmente desenvolvido para a lubrificação de caixas de engrenagens hipóides de eixos traseiros, denominados de diferenciais, caixas de mudança e engrenagens hipoidais em geral. Este tipo de engrenagem é utilizada devido sua característica de engrenamento, suportando elevadas pressões.

O TEXSA GEAR MULTI GL-5 é produzido nos graus de viscosidade SAE 80W, 80W90, 90, 140, 85W140 e 250 e através de seus aditivos enquadram-se também na classificação MIL-L-2105 D, utilizada por várias montadoras e fabricantes de caixas. A sigla GL, vem do termo americano GEAR LUBRICANT (GL), ou seja, lubrificante de engrenagens.

A grande gama de viscosidades, varia em função de cada fabricante, conforme o projeto de suas caixas de engrenagens.

Atualmente, nos veículos de passeio mais modernos, as trocas são realizadas, somente em caso de vazamentos ou quebras permanecendo nas caixas por longo tempo; nos veículos pesados, máquinas agrícolas, tratores e fora de estrada, estas trocas são em função da severidade das operações e são frequentes.

Devido sua principal aditivação de extrema pressão, para minimizar o atrito severo entre os dentes das engrenagens, é denominado de EP, ou seja, extrema pressão. Através do seu pacote de aditivos, minimiza a corrosão, o desgaste, possuindo ainda propriedades antiespumantes e antiferrugem.

**OBS:** A substituição do óleo API GL-4 pelo API GL-5, nem sempre é possível, e depende da liberação ou não do fabricante da caixa; isto ocorre devido a alguns componentes que são incompatíveis com óleos API GL-5, podendo causar danos.

## API GL-5, MIL L2105-D, MAN 342 TYPE M-1 – REG. ANP 8838

### CARACTERÍSTICAS TÍPICAS

<i>Ensaio</i>	<i>Método ASTM</i>	<i>80W</i>	<i>80W-90*</i>	<i>90*</i>	<i>140</i>	<i>85W-140*</i>	<i>250</i>
Densidade 20/4°C, g/mL	D 4052	0,864	0,880	0,889	0,899	0,885	0,882
Aparência Visual		Límpido	Límpido	Límpido	Límpido	Límpido	Límpido
Cor, ASTM	D 1500	L3,0	5,5	L4,5	L5,5	L5,5	L5,5
Visc. Cinemática 40°C, cSt	D 445	54,31	117,95	173,5	394,1	267,92	577,41
Visc. Cinemática 100°C, cSt	D 445	7,95	16,85	15,9	30,6	28,08	47,21
Índice de Viscosidade	D 2270	114	156	94	110	139	135
Água por Crepitação	NBR 16358	Passa	Passa	Passa	Passa	Passa	Passa
Ponto de Fluidez, °C	D 97	-30	-21	-18	-18	-18	-9
TAN, mg KOH/g	D 664	0,18	0,11	0,14	0,11	0,14	0,13
Corrosão Lâmina Cobre	D 130	1b	1b	1b	1b	1b	1b
Ponto de Fulgor, °C	D 92	213	240	228	230	238	292



**\*Texsa Gear Multi GL-5 85W-140**  
**Produto Aprovado atendendo às classificações**  
**TE-ML 04A, 12E, 16D e 21A.**  
**Texsa Gear Multi GL-5 90 e 80W-90**  
**Produto Aprovado atendendo às classificações**  
**TE-ML 05A, 12E, 16B, 17B, 19B e 21A.**



ZF Group · 88038 Friedrichshafen

Texsa do Brasil Ltda  
Av. Florivaldo R. Tampeline, 1470  
87507070 Umuarama/PR

BRAZIL

**Corporate Research & Development**

Department DIWM4  
From Stella Braunschweig  
Phone +49 7541 77 7853  
E-mail Stella.Braunschweig@zf.com  
Date 2021-08-16

**Texsa Gear Multi GL-5 90**

Dear Madam / Sir

Due to your confirmation that the formulation of your lubricant Texsa Gear Multi GL-5 90 (ZF approval number ZF001941) has not changed and will continue to conform to the data of your approval application of 2015-10-23, we confirm approval for application according to the ZF Lubricant Class/es

- **TE-ML 05A**
- **TE-ML 12E**
- **TE-ML 16B**
- **TE-ML 17B**
- **TE-ML 19B**
- **TE-ML 21A**

Approval is based on the data in your approval application of 2015-10-23, extended on 2021-08-16. Any alterations of these data will result in withdrawal of approval and the need to submit a new application. You are under the obligation to report any changes to approved products without delay. The approval of this oil is subject to the General Terms and Conditions for Research and Development Services (applicable as of 03/2017) of ZF Friedrichshafen AG.

Approval is valid for 12 months. If after 11 months you use our approval system "lubricant data file" to confirm unaltered condition of the formulation, approval will be extended by another 12 months. If not, approval will automatically be withdrawn. A reminder will be mailed to you in good time.

Best regards

Stella Braunschweig

Chairman of the Supervisory Board: Dr.-Ing. Franz-Josef Paefgen  
Board of Management: Wolf-Henning Scheider (CEO),  
Dr. Konstantin Sauer, Dr. Martin Fischer, Sabine Jaskula, Dr. Holger Klein,  
Wilhelm Rehm, Stephan von Schuckmann  
Headquarters: Friedrichshafen •  
Trade register of the municipal court of Ulm HRB 630206

**ZF Group**  
ZF Friedrichshafen AG  
Graf-von-Soden-Platz 1  
88046 Friedrichshafen  
Germany  
Phone +49 7541 77-0  
Fax +49 7541 77-908000



ZF Group · 88038 Friedrichshafen

Texsa do Brasil Ltda  
Av. Florivaldo R. Tampeline, 1470  
87507070 Umuarama/PR

BRAZIL

**Corporate Research & Development**

Department DIWM4  
From Stella Braunschweig  
Phone +49 7541 77 7853  
E-mail Stella.Braunschweig@zf.com  
Date 2021-08-16

**Texsa Gear Multi GL-5 80W90**

Dear Madam / Sir

Due to your confirmation that the formulation of your lubricant Texsa Gear Multi GL-5 80W90 (ZF approval number ZF001942) has not changed and will continue to conform to the data of your approval application of 2015-10-23, we confirm approval for application according to the ZF Lubricant Class/es

- **TE-ML 05A**
- **TE-ML 12E**
- **TE-ML 16B**
- **TE-ML 17B**
- **TE-ML 19B**
- **TE-ML 21A**

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**ZF Group**  
ZF Friedrichshafen AG  
Graf-von-Soden-Platz 1  
88046 Friedrichshafen  
Germany  
Phone +49 7541 77-0  
Fax +49 7541 77-908000



ZF Group · 88038 Friedrichshafen

Texsa do Brasil Ltda  
Av. Florivaldo R. Tampeline, 1470  
87507070 Umuarama/PR

BRAZIL

**Corporate Research & Development**

Department DIWML  
From Stella Braunschweig  
Phone +49 7541 77 7853  
E-mail Stella.Braunschweig@zf.com  
Date 2022-07-18

**Texsa Gear Multi Gl-5 85W140**

Dear Madam / Sir

Due to your confirmation that the formulation of your lubricant Texsa Gear Multi Gl-5 85W140 (ZF approval number ZF001458) has not changed and will continue to conform to the data of your approval application of 2013-08-13, we confirm approval for application according to the ZF Lubricant Class/es

- **TE-ML 05A**
- **TE-ML 12E**
- **TE-ML 16D**
- **TE-ML 21A**

Approval is based on the data in your approval application of 2013-08-13, extended on 2022-07-18. Any alterations of these data will result in withdrawal of approval and the need to submit a new application. You are under the obligation to report any changes to approved products without delay. The approval of this oil is subject to the General Terms and Conditions for Research and Development Services (applicable as of 03/2017) of ZF Friedrichshafen AG.

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Board of Management: Wolf-Henning Scheider (CEO),  
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Wilhelm Rehm, Stephan von Schuckmann  
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Graf-von-Soden-Platz 1  
88046 Friedrichshafen  
Germany  
Phone +49 7541 77-0  
Fax +49 7541 77-908000