

### *Technical Data Sheet*

#### **Texol Grease™ PTFE**

Fully synthetic high temperature greases

#### **Product Description**

Texol Grease PTFE greases are synthetic bearing lubricants. Formulated from an advanced synthetic fluid and thickened with a temperature-stable, non-soap base, Texol Grease PTFE are a blend of additives and lubricating solids for exceptional wear protection. Service life and relubrication intervals may be extended. Primarily developed for extended service in oven conveyor bearings, Texol Grease PTFE is recommended for applications such as paint drying ovens and textile tenter frames, where minimum application and drip-free performance are needed to promote good housekeeping, and to also minimize maintenance and relubrication.

The components of Texol Grease PTFE have especially been selected to optimize the following characteristics:

- High-temperature resistance to oxidation, thermal and chemical stability, resistance to organic solvents and most chemicals even at high temperatures, including strong acids, alkalis, and oxidizing agents, excellent lubricating capabilities as shown by Standard laboratory tests, and extensive field evaluations, low volatility at high temperatures and/or high vacuum, formulated to address environmental concerns, Texol Grease PTFE is free of lead, chlorinated solvents, and barium.

#### **Applications and Uses**

- For rolling and sliding bearings with extremely extended relubrication intervals such as in:
  - film stretching machines
  - tenter frames for textiles
  - oven carriages in the ceramics industry
- For high-temperature lubrication of rolling and sliding bearings
- May be applied manually or via automatic dispensing equipment
- Under hostile ambient conditions
- Texol Grease PTFE 0 is used for relubrication of Texol Grease PTFE 2
- Well suited for the lubrication of armatures and sealing elements.
- Pumpable in central lubrication systems
- Temperature application range -35 °C to +260 °C ( at higher operating temperatures adequate ventilation must be ensured ) and may intermittently be exposed to temperatures up to +280 °C
- Texol Grease PTFE greases are also well suited as an assembly and sealing element for packaging, seals and similar components.

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#### Advantages

- Extended relubrication intervals without risking lubricant starvation or an increase in energy consumption.
- Virtually inert below 300 °C, Texol Grease PTFE greases resist thickening and hardening, which is typical of mineral oil products in high temperature applications.
- Minimum consumption promotes economical use and clean operating conditions.
- Resistant to practically all solvents, including chlorinated hydrocarbons, strong acids, alkalis and oxidizing agents, e.g., natural gas, benzene petroleum ether, benzol, toluene, cyclohexane, dioxane, tetrahydrofurane, ethyl acetate, acetone, chlorobenzene, tetrachlormethane, trichlorethylene, halogens, potassium hydroxide and hydrochloric, phosphoric, sulphuric and nitric acids.
- Compatible with the following sealing materials: NBR, EPDM, NR, MWQ, PVMQ, PA, PE, PUR, PTFE.
- Non-flammable

#### Characteristics

Property (Unit)	PTFE	Method
NLGI grades	000 – 00 – 0 – 1 – 2 – 3	DIN 51818
Base oil viscosity at 40°C, mm <sup>2</sup> /s	510	DIN 51366
Base oil viscosity at 100°C, mm <sup>2</sup> /s	46	DIN 51366
Base oil viscosity at 200°C, mm <sup>2</sup> /s	7	DIN 51366
Thickener	PTFE	-
Lubricating Solids Type	PFPE	-
Colour	white	-
Density at 15°C, kg/m <sup>3</sup>	1930	DIN 51757
Viscosity index	145	DIN ISO 2909
Behavior in the presence of water, 90 °C	0	DIN 51807/1
Oxidation stability, after 100h, hPa	<250	DIN 51808
Oxidation stability, after 300h, hPa	<400	DIN 51808
Emcor test, IP 220/67, Rating	0/0	DIN 51802
Copper corrosion, 100°C, after 24 h	1a	DIN 51811
Rust Prevention properties, Rating	1	ASTM D 1743
Four ball weld point, N	16000 / 16500	DIN 51 562
Four ball test scar diameter, mm	0.80	ASTM D 2266
Four ball wear test scar diameter, mm	<0.6	DIN 51350-05-E
SRV test, 50°C, 300N, 2h Amplitude 1000µm, µ	0.07-0.08	DIN E 51834-02-S
FAG-FE 9 Test	Passed	DIN 51821-02-A
Flow pressure at -20°C, hPa	645	DIN 51805
Pour Point, °C	< -35	DIN ISO 3016
Operating temperature range, °C	-35 / + 260	-

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