Dr. Tillwich GmbH
Werner Stehr

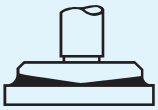
Fluorstatic 70 PTFE

Article No. TF2450

Precision Grease for Metals and Plastics

Product Specifications

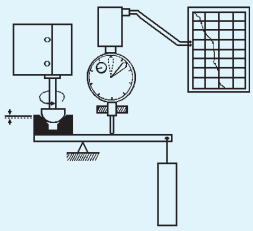
Laboratory Data:

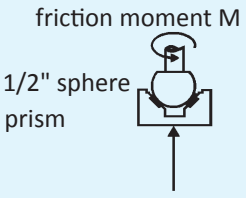
Shear Viscosity (DIN 51810-1)		
cone CP25 1° $\dot{\gamma}$ **= 1000/s**	**Temperature**	**η (mPa·s)**
 system cone-on-plate	25 °C [77 °F]	365 - 495
Viscosity-Index (ISO)		140 (base oil)
Flow Behaviour		intrinsically viscous
Viscosity-Temperature-Behaviour		good

Color	white
Oil Separation (FTMS) 48 hrs/85 °C [185 °F]	18 %
Permanent Low Temperature Base Oil 72 hrs fluid	-45 °C [-49 °F]
Application Temperature	-40 °C to +200 °C [-40 °F to +292 °F]
Base Oil	perfluorinated polyether
Viscosity Base Oil 20 °C [68 °F]	70 mm²/s
Thickener	micro PTFE powder no metallic soaps
Durability	excellent
Drop Stability	good
Compatibility with Plastics	very good

Tribological Data:

Test System: sphere on prism (ISO 7148/2)





Friction Behaviour
dependent on sliding speed

v (mm/s)	**f**	friction coefficient f (0.1 0.2 0.3 0.4)
0	0.07	
20	0.03	
50	0.03	
200	0.03	
materials:		steel/POM, load 3 N, 25 °C [77 °F]
lubricant:		Fluorstatic 70 PTFE

Wear Behaviour
comparison: dry and lubricated with Fluorstatic 70 PTFE

materials	wear (in mm) (0.01 0.03 0.1 0.3 1.0)
St/brass: TF2450	
dry	
St/POM: TF2450	
dry	
test parameters:	load 30 N, distance 10 km, 25 °C [77 °F], v=28.1 mm/s

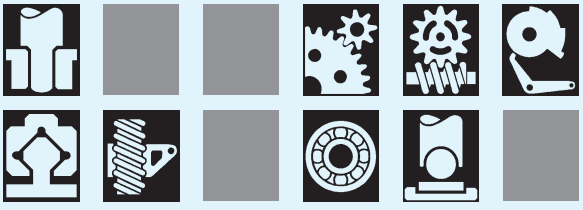
Comments:

Problem solver for difficult sliding processes even under extreme environmental conditions. High resistance against ageing and oxidation reactions. Incorporated micro PTFE powder guarantees emergency running properties. Very good stick slip damping. No diffusion of thickener into plastic materials.

If application is intended on steel at high humidities and higher temperatures at the same time, component tests are recommended before use.

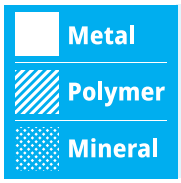
Application:

For metal/metal, metal/jewel, metal/plastic and plastic/plastic bearings. For miniature bearings, precision gears, instruments, plotters, printers, clock movements, linear guiding systems, connecting links, ball bearings, controls, automotive, aviation and nautical instruments, offshore instruments.

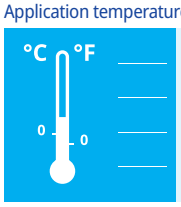


Product

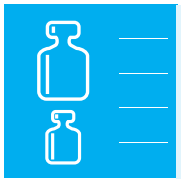
Bearing material



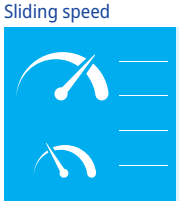
Application temperature



Bearing load

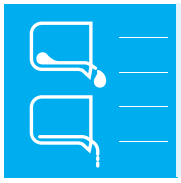


Sliding speed



Durability

Viscosity



Wetting

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