Dr. Tillwich GmbH
Werner Stehr

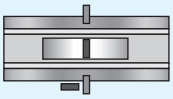
Precision Oil 12767

Article No. TK2730

Precision Oil for Metals and Plastics

Product Specifications

Laboratory Data:

Viscosity		
Stabinger (ASTM D7042)	**Temperature**	**ν (mm²/s)**
	0 °C [32 °F] 20 °C [68 °F] 40 °C [104 °F]	2600 600 200
Viscosity-Index (ISO)		140
Viscosity-Temperature-Behaviour		good

Color	light yellow
Permanent Low Temperature 72 hrs fluid	-25 °C [-13 °F]
Application Temperature	-20 °C to +80 °C [-4 °F to + 176 °F]
Density 20 °C [68 °F] (DIN)	0.87 g/cm³
Surface Tension	31 mN/m
Evaporation Rate 24 hrs/105 °C [221 °F]	0.04 % very low
Drop Stability /Wetting	good
Durability	good
Corrosion Resistance	brass: very good steel: very good
Compatibility with Plastics	
compatible	ABS, ASA, ABS/PC, PA12, PA66, PBT, POM
satisfactory	PC, PEBA
Composition	partially synthetic oil on base of esters and hydrocarbons with additives

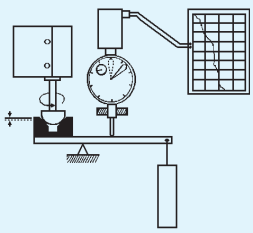
Comments:

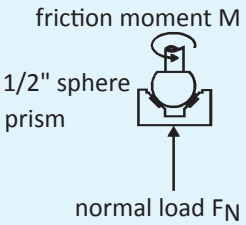
Partially synthetic precision oil on base of synthetic ester oils, natural hydrocarbons and polyalpha-olefines. Precision Oil 12767 is equipped with an additive package for high ageing and oxidation stability as well as corrosion resistance, which ensures its application in the field of horology and precision mechanics.

P316c

Tribological Data:

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





Friction Behaviour
dependent on sliding speed

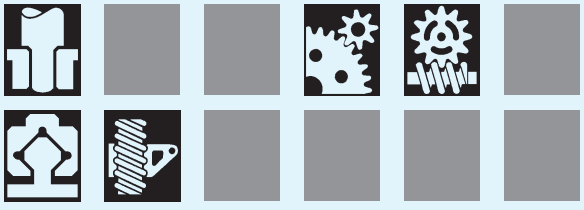
v (mm/s)	f	friction coefficient f (0.1 0.2 0.3 0.4)
0	0.13	
20	0.05	
50	0.05	
200	0.07	
materials:	steel/POM, load 3 N, 25 °C [77 °F]	
lubricant:	Precision Oil 12767	

Wear Behaviour
comparison: dry and lubricated with Precision Oil 12767

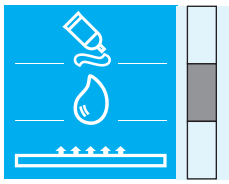
materials	wear (in mm) (0.01 0.03 0.1 0.3 1.0)
St/POM: TK2730	
dry	
St/steel: TK2730	
dry	
test parameters:	load 30 N, distance 10 km, 25 °C [77 °F], v=28.1 mm/s

Application:

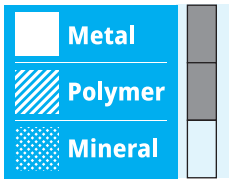
Precision oil for metallic sliding combinations in precision instruments. For radial bearings from 3 mm to 8 mm diameter (0.118 to 0.315 inches) in wall-clocks, pendulum-clocks, timers. For lubrication of gears, worm gears, linear guides, etc. For slow to medium sliding speeds.



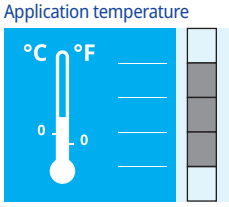
Product



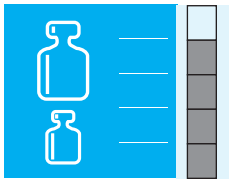
Bearing material



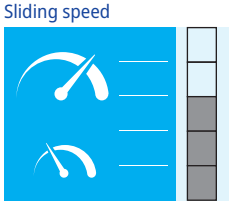
Application temperature



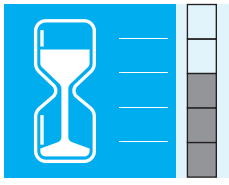
Bearing load



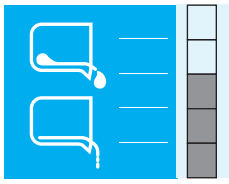
Sliding speed



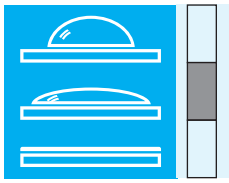
Durability



Viscosity



Wetting



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