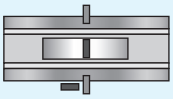
Dr. Tillwich GmbH
Werner Stehr

Product Specifications

Silber B
Article No. TK2300
Watch and Instrument Oil

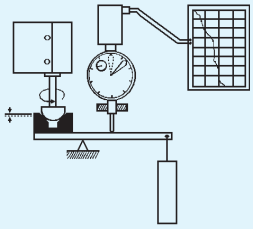
Laboratory Data:

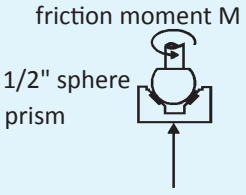
Viscosity		
Stabinger (ASTM D7042)	**Temperature**	**ν (mm²/s)**
	0 °C [32 °F]	240
	20 °C [68 °F]	70
	40 °C [104 °F]	30
Viscosity-Index (ISO)		150
Viscosity-Temperature-Behaviour		good

Color	slightly yellow, clear
Permanent Low Temperature 72 hrs fluid	-30 °C [-22 °F]
Application Temperature	-25 °C to +80 °C [-13 °F to +176 °F]
Density 20 °C [68 °F] (DIN)	0.95 g/cm³
Surface Tension	31 mN/m
Evaporation Rate 24 hrs/105 °C [221 °F]	0.1 % very low
Drop Stability	good
Durability	good
Corrosion Resistance	brass: very good steel: very good
Composition	synthetic oil on ester base with hydrocarbons

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	0.15	
20	0.14	
50	0.02	
200	0.01	
materials:	steel/brass, load 3 N, 25 °C [77 °F]	
lubricant:	Silber B	

Wear Behaviour
comparison: dry and lubricated with Silber B

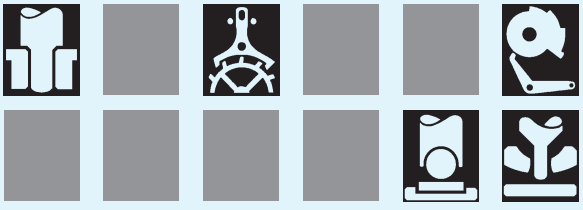
materials	wear (in mm) (0.01 0.03 0.1 0.3 1.0)
St/brass: TK2300	
dry	
St/steel: TK2300	
dry	
test parameters:	load 30 N, distance 10 km, 25 °C [77 °F], v=28.1 mm/s

Comments:

Silber B is a synthetic watch and instrument oil based on esters and with a small amount of synthetic hydrocarbons. Its excellent pressure absorption capacity and the high surface tension ensure for-life lubrication of highly loaded sliding bearings. Suitable for high and low velocities. Low inner friction due to low viscosity. Compatibility tests are necessary if used with plastics!

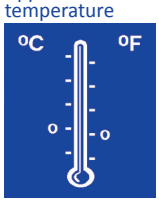
Application:

Lubrication of highly loaded, low or high-speed metal and jewel bearings up to pocket-watch calibers.



Product


Bearing material


Application temperature


Bearing load


Sliding speed


Durability


Viscosity


Wetting


P035e

Dr. Tillwich GmbH Werner Stehr
Murber Steige 26
D-72160 Horb (Ahldorf)

Phone: +49 (0) 7451 5386-0
Telefax: +49 (0) 7451 5386-70
info@tillwich-stehr.com

Certified acc. to ISO 9001