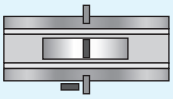
Dr. Tillwich GmbH
Werner Stehr

Silber B
Article No. TK2300
Watch and Instrument Oil

Product Specifications

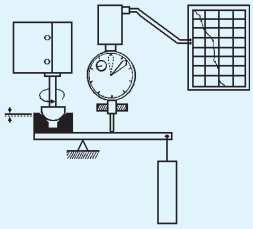
Laboratory Data:

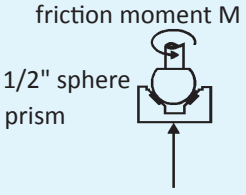
Viscosity		
Stabinger (ASTM D7042)	**Temperature**	**ν (mm²/s)**
	0 °C [32 °F]	240
	20 °C [68 °F]	70
	40 °C [104 °F]	30
Viscosity-Index (ISO)		130
Viscosity-Temperature-Behaviour		good

Color	slightly yellow, clear
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)	0.94 g/cm³
Surface Tension	28 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	0.12	
20	0.09	
50	0.07	
200	0.06	
materials:	steel/ruby, load 3 N, 25 °C [77 °F]	
lubricant:	Silber B	

Wear Behaviour
comparison: dry and lubricated with Silber B

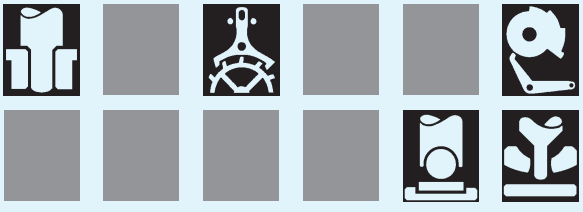
materials		wear (in mm) (0.01 0.03 0.1 0.3 1.0)
St/ruby:	**TK2300**	
	dry	
St/steel:	**TK2300**	
	dry	
test parameters:	load 30 N, distance 10 km, 25 °C [77 °F], v=28.1 mm/s	

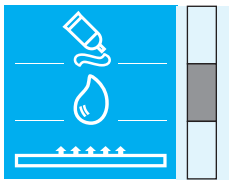
Comments:

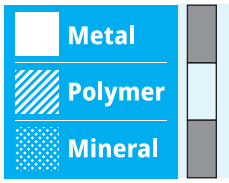
Silber B is a synthetic watch and instrument oil based on esters and with a small amount of synthetic hydrocarbons. Its excellent pressure absorption capacity and the high surface tension ensure for-life lubrication of highly loaded sliding bearings. Suitable for high and low velocities. Low inner friction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

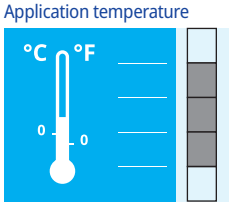
Application:

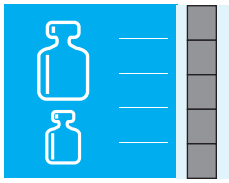
Lubrication of highly loaded, low or high-speed steel and jewel bearings up to pocket-watch calibers.

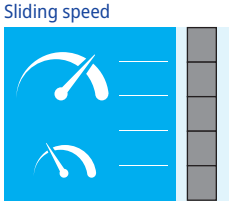


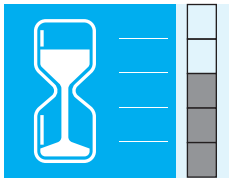
Product


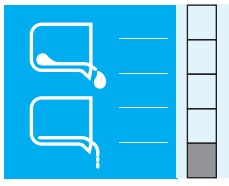
Bearing material


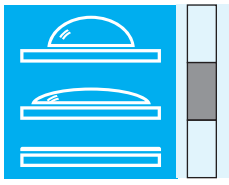
Application temperature


Bearing load


Sliding speed


Durability


Viscosity


Wetting


Certified acc. to ISO 9001

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