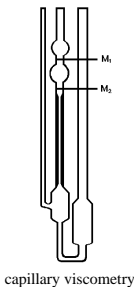


# Product Specifications

## Laboratory Data:

Kinematic Viscosity (DIN)		
 <small>capillary viscometry</small>	Temperature	$\nu$ (mm <sup>2</sup> /s)
	0°C [32°F]	810
	20°C [68°F]	500
	40°C [104°F]	350
	Viscosity Index (ISO)	420
Viscosity-Temperature-Behavior		very good

**Permanent Low Temperature** -35°C  
(72 hrs without crystallization) [-31°F]

**Application Temperature** -30°C to +120°C  
[-22°F to +248°F]

**Density** 20°C [68°F] (DIN) 0.97 g/cm<sup>3</sup>

**Surface Tension** 21 mN/m

**Color** blue

**Evaporation Rate** -0.1 %  
(24 hrs/105°C [221°F]) very low

**Wetting** very good

**Durability** very good

**Compatibility with Plastics**

**compatible** PA11, PA66, PBTP, PC  
POM, PPO, SB, TPU

**satisfactory** ABS, PA12, PA6-3T

**incompatible** ASA, POM (CL)

**Chemical Name** Polysiloxanealcohol

## Comments:

Special lubricant for plastic/plastic and plastic/metal bearing combinations. Very good friction and wear reduction. Aging better than silicone oils. Among the highest Viscosity Indices of all known clock and instrument oils, which allows for both, application in wide temperature ranges and excellent noise damping. Good wetting characteristics. Epilamination with Antispread necessary, when applying large quantities of oil.

**Experiences:** For over 10 years in series production. Manufactured quantity over 50.000.000 clock movements. Long-term stability (over 10 years) is well established.

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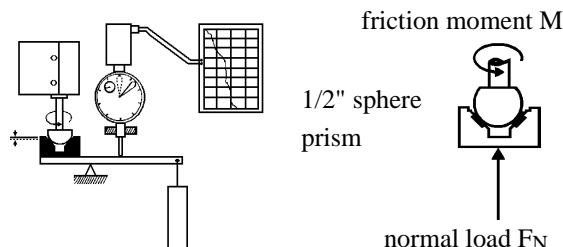
# Plastic Oil K2363/509

Article No.: TS2302

Precision Lubricant for Plastics

## Tribological Data:

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

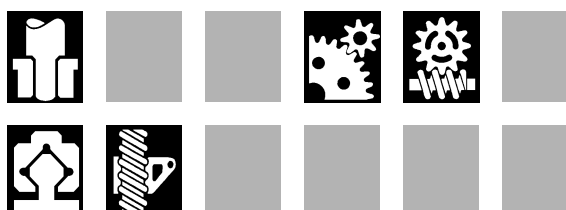


Friction Behavior					
dependent on sliding speed					
$\nu$ (mm/s)	f	friction coefficient f			
		0.1	0.2	0.3	0.4
0	0.11	[Bar chart showing high friction]			
20	0.01	[Bar chart showing low friction]			
50	0.01	[Bar chart showing low friction]			
200	0.01	[Bar chart showing low friction]			
materials:		steel/POM, load 3N, 25°C [77°F]			
lubricant:		Plastic Oil K2363/509			

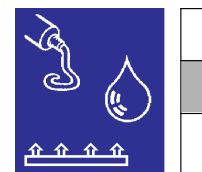
Wear Behavior						
comparison: dry and lubricated with Plastic Oil K2363/509						
materials		wear (in mm)				
		0.01	0.03	0.1	0.3	1.0
St/POM: K2363	dry	[Bar chart showing high wear]				
	dry	[Bar chart showing low wear]				
POM/PC: K2363	dry	[Bar chart showing high wear]				
	dry	[Bar chart showing low wear]				
test parameters:		load 30N, distance 10 km, 25°C [77°F], $\nu$ = 28.1 mm/s				

## Application:

Plastic bearings in precision machinery; analog quartz movements (step-motor), switch clocks, timers, medical instruments, optics, cameras, cassette decks, controls, video drives.



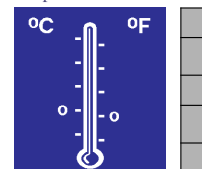
Product



Bearing material



Application temperature



Bearing load



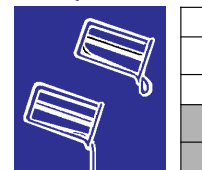
Sliding speed



Durability



Viscosity



Wetting

