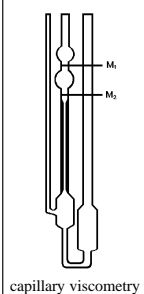


Product Specifications

Laboratory Data:

Kinematic Viscosity (DIN)		
Temperature	v (mm ² /s)	
0°C [32°F]	60	
20°C [68°F]	25	
40°C [104°F]	10	
Viscosity Index (ISO)	200	
Viscosity-Temperature-Behavior very good		



capillary viscometry

Permanent Low Temperature -60°C
(72 hrs without crystallization) [-76°F]
Application Temperature -50°C to +60°C
[-58°F to +140°F]

Density 20°C [68°F] (DIN) 0.92 g/cm³
Surface Tension 32 mN/m
Color yellow, clear

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

Drop Stability very good

Durability good
Corrosion Resistance brass: good
steel: good

Compatibility with Plastics on request
Chemical Name synthetic oil on ester base (free of silicon)

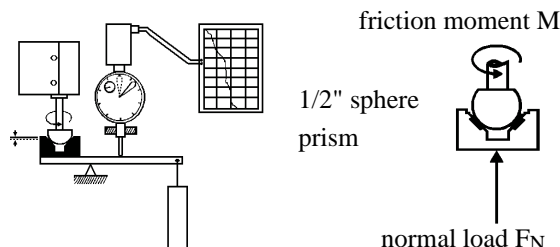
Comments:

Low Temperature Oil 8989 acts as a softener on some plastics and lacquers. Please test their compatibility or request results before application!

It must be taken into account, that all thin-bodied oils tend to higher evaporation and migration, if exposed to elevated temperatures!

Tribological Data:

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



Friction Behavior					
dependent on sliding speed					
v (mm/s)	f	friction coefficient f			
		0.1	0.2	0.3	0.4
0	0.19	[Bar chart showing high friction]			
20	0.13	[Bar chart showing medium friction]			
50	0.08	[Bar chart showing low friction]			
200	0.04	[Bar chart showing very low friction]			

materials: steel/brass, load 3N, 25°C [77°F]
lubricant: Low Temperature Oil 8989

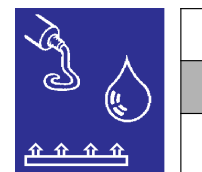
Wear Behavior						
comparison: dry and lubricated with Low Temperature Oil 8989						
materials		wear (in mm)				
		0.01	0.03	0.1	0.3	1.0
St/bs:	Oil 8989	[Bar chart showing low wear]				
	dry	[Bar chart showing high wear]				
St/POM:	Oil 8989	[Bar chart showing low wear]				
	dry	[Bar chart showing high wear]				

test parameters: load 30N, distance 10 km, 25°C [77°F], v = 28.1 mm/s

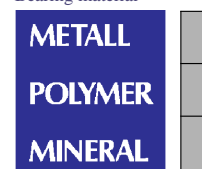
Application:

For metal/metal and many metal/plastic bearing combinations, which are used in critical sliding systems with high contact pressures and high sliding speeds at low ambient temperatures.

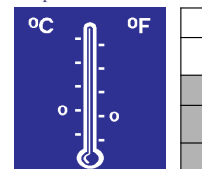
Product



Bearing material



Application temperature



Bearing load



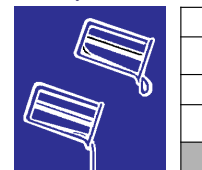
Sliding speed



Durability



Viscosity



Wetting



F1149a

