

VISCOPEX[®] 7-300

An Efficient VI Improver for Specialty Hydraulic Lubricants

A RohMax Product



Function

Viscosity index improver for aircraft hydraulic fluids and similar specialties.

Performance

VISCOPEX[®] 7-300 offers high VI improvement and high shear stability. In combination with the appropriate low-viscosity base fluids, VISCOPEX[®] 7-300 satisfies the extreme low-temperature viscosity requirements of aircraft hydraulics, e.g., MIL-H-5606F, NATO codes H-515, DEF STAN 91-48, Air 3520, and of similar functional fluids.

VISCOPEX[®] 7-300 is manufactured for optimized filterability, demulsibility, and acid number.

Typical addition rate: 15.5 % wt for MIL-H-5606F fluid.

Composition

VISCOPEX[®] 7-300 is a solution of polyalkyl methacrylate (PAMA) in severely refined mineral oil.

Physical Data

Table 1 lists representative physical properties. (These do not constitute specifications.)

Blending Efficiency

The contribution to the kinematic viscosity at 100 °C of VISCOPEX[®] 7-300 in straight mineral base oils is shown in Table 2.

VISCOPEX[®] Series 7 Hydraulic Fluid Viscosity Index Improvers

Typical Physical Properties of VISCOPEX[®] 7-300

Table 1

Visual Appearance	Clear, free of sediment
Color (ASTM D1500)	0.5
Viscosity at 100 °C, mm ² /s (ASTM D445)	882
Density at 15 °C, g/cm ³ (ASTM D4052)	0.94
Flash Point, °C (ASTM D3278)	100
Shear Stability Index (P-SSI) (ASTM 51382) 30 Passes	4
(ASTM 51382) 250 Passes	10
(ASTM D5621) Sonic Test (P-SSI/wt %)	36/5.6
(CEC L-45-A-99) KRL 20h (P-SSI/wt %)	52/5.4

Table 2 Thickening Effect of VISCOPEX[®] 7-300 at 100 °C

	100 N			150 N			200 N			350 N		
VISCOPEX [®] 7-300, % wt	0	5	10	0	5	10	0	5	10	0	5	10
Viscosity at 100 °C, mm ² /s	4.0	5.7	7.8	5.1	7.2	9.7	6.2	8.6	11.6	8.9	12.0	15.9

Density

The typical density of VISCOPLEX® 7-300, as a function of temperature, is given in Figure 1.

Bulk Viscosity

The typical bulk viscosity of VISCOPLEX® 7-300, as a function of temperature, is given in Figure 2.

Additional Information

For additional information on product availability, performance data and Material Safety Data Sheets, please contact your RohMax account manager or Customer Service Representative.

For an overview of our entire VISCOPLEX® and VISCOBASE® product range and complete information on handling and storage, please visit the Products & Applications section on our website www.rohmax.com.

Figure 1 Density vs. Temperature

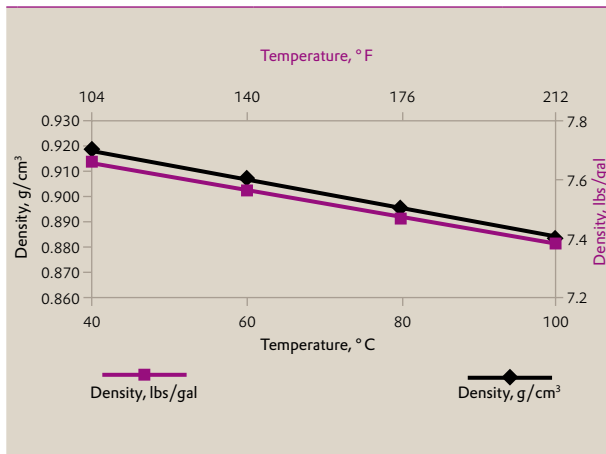
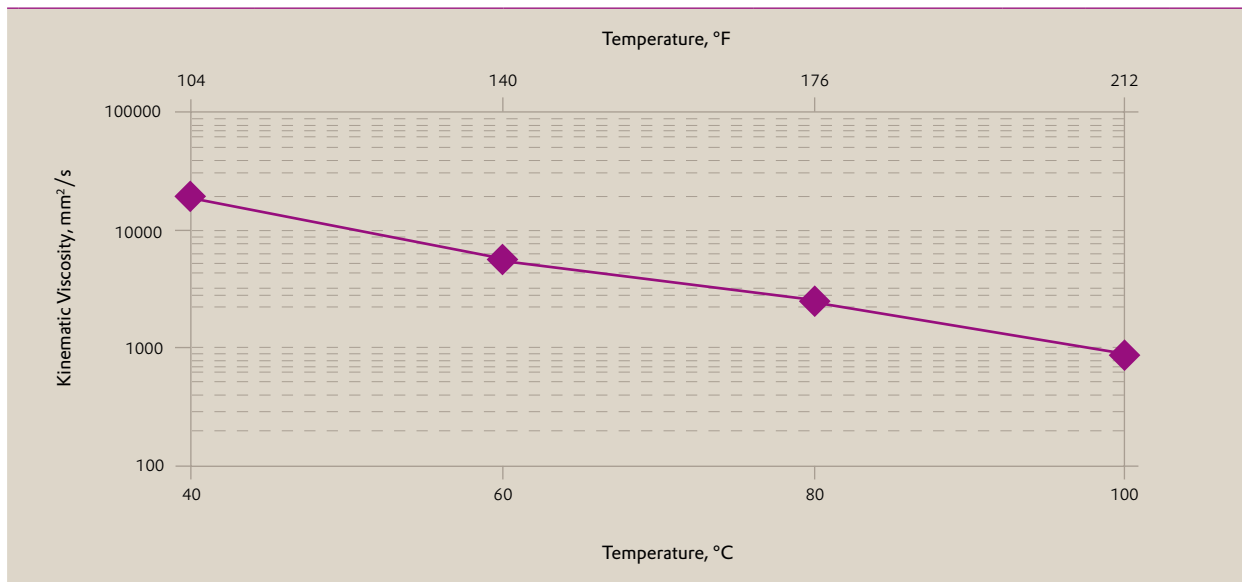


Figure 2 Kinematic Viscosity vs. Temperature



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