

VISCOPLEX® 14-304

Additive for Specialty Applications

Function

Polymeric Cold Flow Improver.

Performance

VISCOPLEX® 14-304 improves the flow properties of crude oils and other heavy stocks.

Composition

VISCOPLEX® 14-304 is a polymer dissolved in an alcohol-based solvent system.

Physical Data

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

Handling

VISCOPLEX® 14-304 is a dispersion and is therefore more sensitive towards contamination and/or mechanical stress than other VISCOPLEX® products. Non-observance of the following handling instructions may result in decreased stability and can cause the dispersion to coagulate.

- VISCOPLEX® 14-304 has to be kept dry and away from water and any kind of moisture. This includes both (visible) residual water in cleaned tanks, piping, hoses, pumps, etc. as well as condensate or frost/ice on cold surfaces.
- After opening the packaging the product has to be used within 24 hours. Alternatively, VISCOPLEX® 14-304 should be diluted with mineral oil in a ratio of at least 1:10. Note that this will result in an increase in bulk viscosity. Depending on the handling capabilities, an even higher dilution has to be chosen.

Typical Physical Properties of VISCOPLEX® 14-304

Table 1

Visual Appearance	White, viscous liquid
Viscosity, mm ² /s (ASTM D445)	
at 40 °C	410
at 100 °C	460
Density at 40 °C, g/cm ³ (ASTM D4052)	0.92
Flash Point, °C (ASTM D3278)	>110

- VISCOPLEX® 14-304 must not be diluted by polar media, such as short-chain alcohols and especially not water.
- VISCOPLEX® 14-304 must not be exposed to high shear stress. For unloading and handling we recommend the use of membrane or peristaltic pumps and/or forced flow by applied pressure and gravimetric pressure.

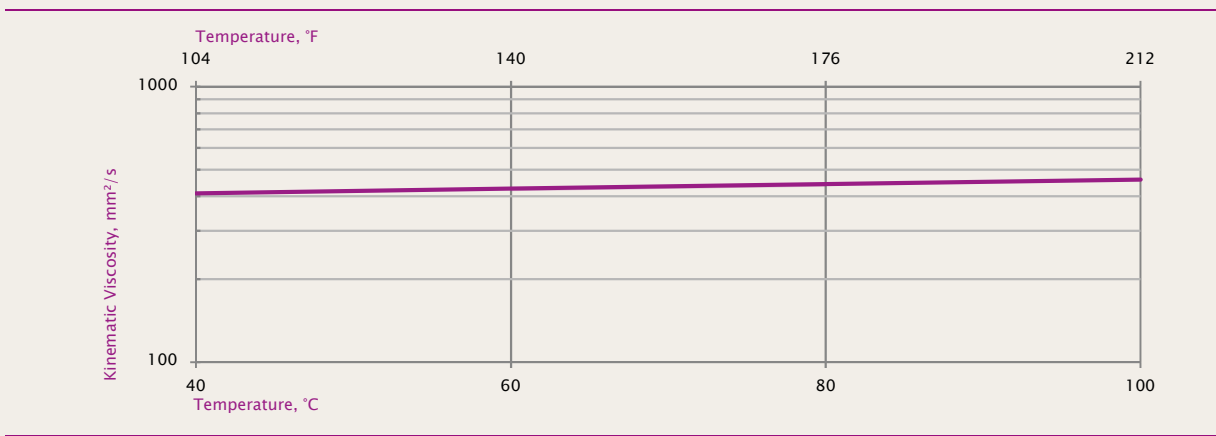
Bulk Viscosity

The typical bulk viscosity of VISCOPLEX® 14-304, as a function of temperature, is given in Figure 1.

Additional Information

For additional information on product availability, performance data and Material Safety Data Sheets, please contact your 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 evonik.com/oil-additives.

Figure 1 Kinematic Viscosity vs. Temperature



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Europe, Africa, Mideast:

Evonik Resource Efficiency GmbH, Kirschenallee, 64293 Darmstadt, Germany, Telephone: +49 6151 1809

Americas:

Evonik Oil Additives USA, Inc., 723 Electronic Drive, Horsham, Pennsylvania 19044-4050, Telephone: +1 215 706 5800, TOLL-FREE: 1 888 876 4629

Asia Pacific:

Evonik Oil Additives Asia Pacific Pte. Ltd., 3 International Business Park 07-18 Nordic European Centre, Singapore 609927, Telephone: +65 6809 6571

oil-additives@evonik.com, Evonik.com/oil-additives