

# VISCOPLEX® 14-303

## Additive for Specialty Applications

### Function

Polymeric Cold Flow Improver.

### Performance

VISCOPLEX® 14-303 improves the flow properties of crude oils and other heavy stocks.

### Composition

VISCOPLEX® 14-303 is a polymer dissolved in a complex solvent system based on Diethylene Glycol.

### Physical Data

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

### Handling

VISCOPLEX® 14-303 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® 14-303 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® 14-303 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® 14-303

Table 1

Visual Appearance	White, viscous liquid
Viscosity, mm <sup>2</sup> /s (ASTM D445)	
at 40 °C	6,090
at 100 °C	2,400
Density at 40 °C, g/cm <sup>3</sup> (ASTM D4052)	0.94
Flash Point, °C (ASTM D3278)	>110

- VISCOPLEX® 14-303 must not be diluted by polar media, such as short-chain alcohols and especially not water.
- VISCOPLEX® 14-303 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.

## Density

The typical density of VISCOPLEX® 14-303, as a function of temperature, is given in Figure 1.

## Bulk Viscosity

The typical bulk viscosity of VISCOPLEX® 14-303, 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 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](http://evonik.com/oil-additives).

Figure 1 Density vs. Temperature

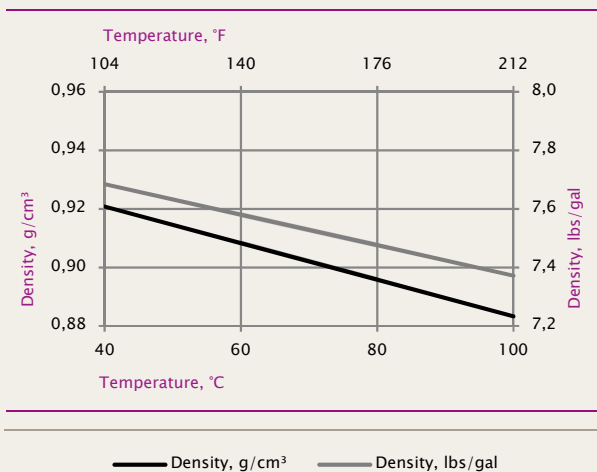
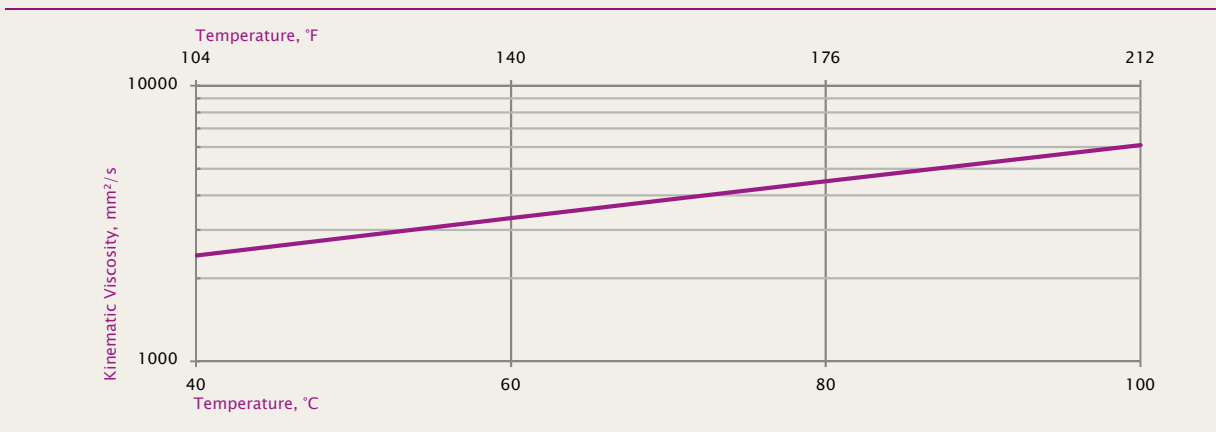


Figure 2 Kinematic Viscosity vs. Temperature



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August 2017

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