Technical Information

VISCOPLEX® 14-302

Cold flow improver for heavy fuel oils, marine diesel fuels and crude oils

Function
Cold flow improver and pour point depressant for heavy fuel oils, marine diesel fuels and crude oils.

Performance
VISCOPLEX® 14-302 reduces the pour point of heavy fuel oils, marine diesel fuels and crude oils.
Typical treat rates are in the range of 0.05 - 1 % by weight.

Composition
VISCOPLEX® 14-302 is a polymer dissolved in a complex solvent system based on Diethylene Glycol and polyalkyl(meth)acrylates.

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

Handling
VISCOPLEX® 14-302 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® 14-302 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.

Table 1 Typical Physical Properties of VISCOPLEX® 14-302

Color	0.5
Viscosity, mm2/s (ASTM D445) at 40 °C at 100 °C	 1.028 900
Density at 15°C, g/cm³ (ASTM D4052)	 0.89
Flash Point, °C (ASTM D3278)	 >110

- After opening the packaging the product has to be used within 24 hours. Alternatively, VISCOPLEX® 14-302 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.
- VISCOPLEX® 14-302 must not be diluted by polar media, such as short-chain alcohols and especially not water.
- VISCOPLEX® 14-302 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® 14-302, 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 Density vs. Temperature

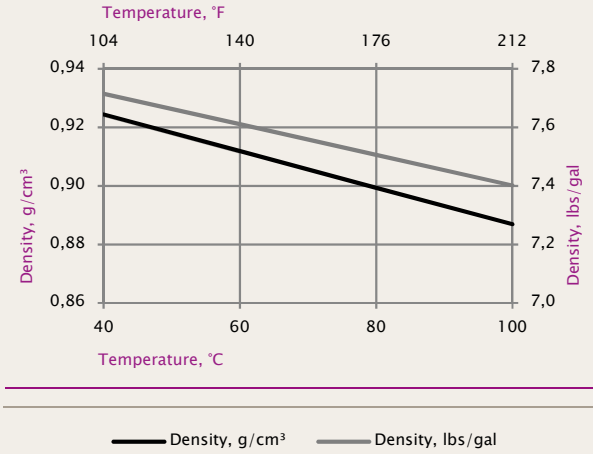
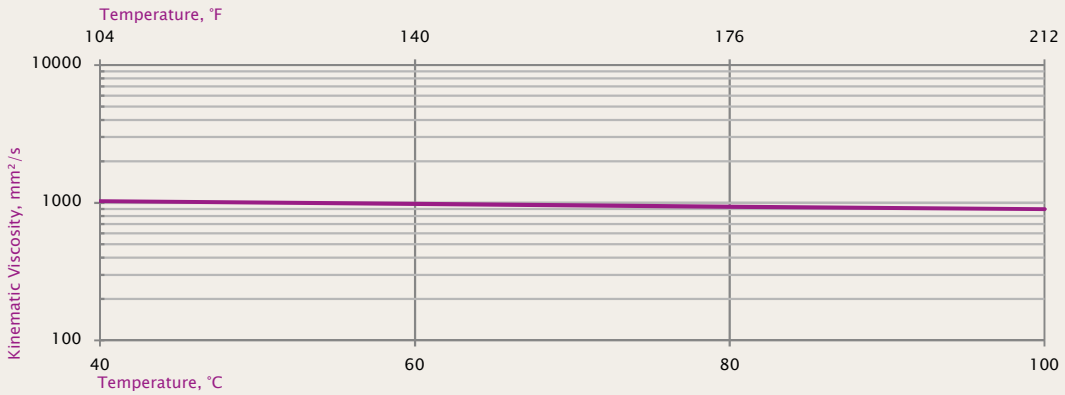


Figure 1 Kinematic Viscosity vs. Temperature



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