Innovative Chemistry for Lubricants

Technical Data Sheet

FUNCTIONAL V-188P2

CONCENTRATED PAO-BASED SHEAR STABLE TACKIFIER

APPLICATION:

FUNCTIONAL V-188P2 is a readily biodegradable tackifier based on olefin copolymer chemistry and formulated in low viscosity polyalphaolefin (PAO) that may be used to prepare synthetic or biodegradable lubricants. **FUNCTIONAL V-188P2** is also an economical replacement to high viscosity metallocene PAO to increase viscosity without reducing solubility for other additives.

COMPOSITION:

FUNCTIONAL V-188P2 is a concentrated olefin copolymer in light polyalphaolefin.

Typical Properties	
Specific Gravity	0.80-0.81
Lbs per Gallon	6.70 - 6.75
Flash Point	>100°C (212°F)
Kinematic Viscosity (ASTM D445)	8000 - 9500 cSt at 100°C
Thickening Efficiency (10wt%; KV at 100°C)	15.7 cSt in ISO 32 Gr. I
	19.2 cSt in PAO6
Color (ASTM D1500)	Colorless to Light Yellow, Cloudy (< 1.0)
Biodegradability (CEC L-33-T-82)	Approx. 66% (Readily)
Biobased Content	0wt%

TREATMENT LEVEL:

Treatment levels from 0.5-2% are typical in lubricants. 1-4% may be used in greases for tackiness, oil bleed reduction, shear stability, and improved yield depending on the grease type.

FUNCTIONAL V-188P2 is compatible in Group I-III paraffinic oils, low viscosity conventional PAO (2-10 cSt), 'biobased' PAO (4 -10 cSt), and some low polarity esters.

FUNCTIONAL V-188P2 may not be compatible in lubricants with high concentrations of mPAO or polybutenes. A viscosity modifier like **FUNCTIONAL V-160P2** can replace mPAO and PB.

HANDLING:

Due to the viscosity of **FUNCTIONAL V-188P2**, elevated temperature (up to approximately 90°C or 200°F) can facilitate handling. Safe handling precautions are the same as those to be taken with the base oil; see the current Safety Data Sheet.

This Technical Data Sheet and the Safety Data Sheet contain information believed to be accurate and reliable. No warranty is made, however, to information beyond the control of FUNCTIONAL PRODUCTS INC. The engineering and management personnel of the user are responsible for determining the suitability of this or any product for any specific application, and this information is offered to them for that purpose. Issue Date: 2020.08.03