FUNCTIONAL PRODUCTS INC.

Innovative Chemistry for Lubricants

Technical Data Sheet

FUNCTIONAL V-4314

SHEAR STABLE LIQUID STYRENE VISCOSITY MODIFIER (20 SSI)

APPLICATION:

FUNCTIONAL V-4314 is a concentrated and shear stable styrene olefin copolymer useful for high performance lubricants including top tier engine oils which require excellent low temperature fluidity and resistance to shear.

The inclusion of styrene into the VM provides greater VI enhancement, some dispersancy, and improved shear resistance relative to a straight olefin copolymer VM.

COMPOSITION:

FUNCTIONAL V-4314 is copolymer in petroleum oil.

Typical Properties			
Appearance (Visual)	Light Yellow to Yellow, Hazy		
Color (ASTM D1500)	≤ 2.0		
Flashpoint, Open Cup (ASTM D92)	215°C / 420°F		
Typical Kinematic Viscosity (ASTM D445)	1300 cSt at 100°C		
	13500 cSt at 40°C		
Specific Gravity	0.851		
Pounds per Gallon	7.10		
Thickening Efficiency, 10wt% in ISO 32 Group I	10.6		
Shear Stability Index, ASTM D6278, 30 cycle	20 SSI		

TREATMENT LEVEL:

Treatment levels of 5% to 20% are recommended.

Example Formula	KV40, cSt	KV100, cSt	Viscosity Index
10wt% V-4314 in Group II+ 120N	50.5	9.4	172
10wt% V-4314 in Group I 150SN	65.8	10.6	150
16.7wt% V-4314 in Group III 6cSt	83.7	12.6	148

HANDLING:

Storage at room temperature is recommended. **FUNCTIONAL V-4314** can be heated (up to approximately 90°C or 200°F) to facilitate handling. **FUNCTIONAL V-4314** is a non-hazardous material; 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.

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