FUNCTIONAL PRODUCTS INC.

Innovative Chemistry for Lubricants

Technical Data Sheet

FUNCTIONAL V-4312

LIQUID STYRENE VISCOSITY MODIFIER (5-10 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 styrene copolymers in a blend of oils.

Typical Properties	
Appearance (Visual)	Light Yellow to Yellow, Hazy
Color (ASTM D1500)	≤ 2.0
Flashpoint, Open Cup (ASTM D92)	>110°C / 230°F
Specific Gravity @ 25°C	0.870
Pounds per Gallon	7.26
Thickening Efficiency, 10wt% in ISO 32 Group I	10.0
Shear Stability Index, ASTM D6278, 30 cycle	5 - 10 PSSI

TREATMENT LEVEL:

Treatment levels of 5% to 20% are recommended.

Example Formula	KV40, cSt	KV100, cSt	Viscosity Index
5wt% V-4314 in Group II 6 cSt	56.51	8.669	129
10wt% V-4314 in Group II 6 cSt	76.37	11.50	143
15wt% V-4314 in Group II 6 cSt	105.3	15.60	157

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.

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