

### FUNCTIONAL V-4312

#### LIQUID STYRENE VISCOSITY MODIFIER (5-10 SSI)

##### APPLICATION:

**FUNCTIONAL V-4312** 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-4312** 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-4312 in Group II 6 cSt	56.51	8.669	129
10wt% V-4312 in Group II 6 cSt	76.37	11.50	143
15wt% V-4312 in Group II 6 cSt	105.3	15.60	157

##### HANDLING:

Storage at room temperature is recommended. **FUNCTIONAL V-4312** can be heated (up to approximately 90°C or 200°F) to facilitate handling. **FUNCTIONAL V-4312** 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.

Issued: 2025.05.07