

FUNCTIONAL V-117

SUPERIOR SHEAR STABLE VISCOSITY INDEX IMPROVER IN GRANULATED "CRUMB" FORM

APPLICATION:

FUNCTIONAL V-117 is a viscosity index (V.I.) improver polymer in concentrated, granulated ("crumb") form. It is dissolved in oil to prepare an economical additive for multi-grade engine oils or an aftermarket "oil treatment" additive. It may also be used as an inexpensive thickener for oil, to avoid blending with expensive oils like bright stocks.

COMPOSITION:

FUNCTIONAL V-117 is an olefin copolymer, derived from ethylene and propylene.

Typical Properties	
Appearance	White rubber
Specific Gravity:	0.87
Thickening efficiency (1.0% in ISO 22 oil)	9 cSt at 100°C
Percent Viscosity Loss ASTM D6278, 30 cycles	7.5%
Shear Stability Index (PSSI) ASTM 6022	15%

TREATMENT LEVEL:

Treatment levels of 0.5-2.0% are typical in industrial lubricants and greases. The detergent-inhibitors used in formulating modern motor oils contain significant but varying levels of polymeric additives. The V.I. improver treatment level therefore depends on the choice of detergent package.

HANDLING:

FUNCTIONAL V-117 should be stored below about 120°F (50°C), as higher temperatures may cause agglomeration due to cold flow of particles. It is a non-hazardous material; see the current Material Safety Data Sheet. Dissolving is best accomplished with continuous agitation at temperatures of 180-230°F (85-110°C). (Higher temperatures will not affect **FUNCTIONAL V-117** but may darken the diluent oil.)

This Technical Data Sheet and the Material 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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