

FUNCTIONAL V-114

VISCOSITY INDEX IMPROVER IN GRANULATED "CRUMB" FORM

APPLICATION:

FUNCTIONAL V-114 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-114 is an olefin copolymer, derived from ethylene and propylene, which has been used as a V.I. improver by major oil companies. A compatible release agent minimizes agglomeration without affecting the properties of the finished lubricant.

Typical Properties	
Appearance	White to amber particles
Specific Gravity:	0.87
Thickening efficiency (6.2% in ISO 22 paraffinic base oil)	1100 - 1600cSt at 100°C

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-114 should be used promptly upon receipt and stored in temperatures no higher than 95°F (35°C). Storage may cause the product to cold flow together and the higher temperatures may cause agglomeration due to cold flow of particles. It is a non-hazardous material; see the current 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-114**, but may darken the diluent oil.)

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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