

### FUNCTIONAL V-113

#### Viscosity Index Improver – 50 SSI OCP in Bale Form

##### APPLICATION:

**FUNCTIONAL V-113** is a viscosity index (V.I.) improver polymer supplied in bale form. It can be dissolved in oil to prepare multi-grade engine oils and treatments, high VI lubricants, and industrial fluids. It may also be used as an inexpensive thickener for oil to avoid blending with expensive oils like bright stocks.

##### COMPOSITION:

**FUNCTIONAL V-113** is an olefin copolymer, derived from ethylene and propylene.

Typical Properties	
Appearance	Clear to Off-White Bale
Specific Gravity	0.86 – 0.88
% Ethylene	50 – 60%
Thickening Efficiency (1wt% in ISO32 Gr. I, 100°C)	14.6 cSt
Treat for 1000 cSt @ 100°C (100N Gr. II)	6.6wt%
Solution Viscosity (1wt% in 100N Gr. II, 100°C)	12.2 cSt
Shear Stability Index (PSSI), ASTM D6278	50 SSI

##### 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:

Dissolving is best accomplished with continuous agitation at temperatures of 176-210°F (80-100°C). Higher temperatures will not affect **FUNCTIONAL V-113** but may darken the diluent oil. Use 0.05wt% phenolic anti-oxidant for best results during solubilization.

**FUNCTIONAL V-113** should be stored below 122°F (50°C) and is a non-hazardous material; see the current SDS.

Handling Details	
Form	Bale
Dimensions	13.4x26.4x5.5" / 34x67x14 cm
Bale Weight	55 lbs / 25 kg
Wrap	EVA, 87°C melt
Pallet Stacking	5 rows of 4

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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