

FUNCTIONAL V-739

HIGH VISCOSITY BRIGHT STOCK AND POLYBUTENE REPLACEMENT

APPLICATION:

FUNCTIONAL V-739 is a pure liquid viscosity modifier with extremely high thickening efficiency, excellent shear stability, and low temperature fluidity intended to replace or reduce bright stock, polybutenes, and polymethacrylates for improved formula economy in lubricants.

COMPOSITION:

FUNCTIONAL V-739 is a high viscosity olefin copolymer with no diluent.

Typical Properties	
Appearance, Visual	Clear to Slight Haze Slight Yellow to Orange
Color, ASTM D1500	2.0
Density (lb/gal), ASTM D1475	7.1
Kinematic Viscosity @ 100°C, ASTM D445	Semi-Fluid Polymer in Open Head Drum 62,000 @ 100°C
Flash Point, ASTM D92 COC	>250°C (518°F)
Thickening Efficiency, 10wt% in ISO 32 Group I	30.4 cSt @ 100°C
Shear Stability Index (PSSI), ASTM D6278	< 3 SSI
20hr KRL Shear Stability, CEC L-45-A-99	45 SSI

TREATMENT LEVEL:

Treatment levels of 1 – 10% are typical in industrial lubricants and greases. **FUNCTIONAL V-739** is compatible in most Group I-III paraffinic oils, naphthenic oils, and some low viscosity PAO.

Comparison of Treat Rate in 4 cSt Group III for **FUNCTIONAL V-739** versus High Viscosity Polybutene (PB 2400)

ISO VG	22	32	46	68	100	150
wt% w/ V-739	0.0%	2.3%	4.0%	5.9%	7.8%	9.7%
Viscosity Index w/ V-739	122	176	193	199	201	200
wt% w/ PB 2400	0.0%	6.0%	10.5%	15.5%	20.5%	26.0%
Viscosity Index w/ PB 2400	122	140	145	145	145	145

HANDLING:

FUNCTIONAL V-739 is a non-hazardous material; see the current Safety Data Sheet.

Dissolving is best accomplished with continuous agitation at temperatures of 104-212°F (40-100°C). **FUNCTIONAL V-739** may be preheated in a hot room or tank at up to 176°F (80°C) to aid in pumping but long term storage should remain below 140°F (60°C).

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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