

COMPONENTS

HiTEC[®] 5850B

Olefin-based VI Improver Polymer in Soluble Wrapper



For Use in Crankcase and Industrial Oils & Greases

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Application

HiTEC® 5850B olefin-based VI improver polymer is recommended for use in the manufacture of liquid NDOCP VI improvers for use in formulating crankcase and industrial oils and greases. For grease applications, HiTEC® 5850B is typically used to provide improved tackiness, structural stability and improved yield. It is packaged in an oil soluble wrapper that does not need to be removed during the grinding and solubilizing process. Its amorphous characteristics result in robust low temperature properties and low pour point dosage requirements.

Key Performance Benefits

- Easy to handle in solid form
- Can be further sheared down to increase the shear stability
- Improved tackiness/structural stability (Grease)

Recommended Dosage

HiTEC® 5850B dosage will vary depending on desired finished oil properties. For blending purposes, HiTEC® 5850B polymer is typically handled as a viscous polymer-in-oil VI improver concentrate. Preparation of the concentrate involves polymer granulation followed by its solubilization in a suitable base oil. Mixing the concentrate for four hours at 150°C with nitrogen blanketing is typically required. Treat rates for grease are typically 0.1 to 1.0 wt. %.

Please contact your Afton Chemical representative for specific dosage recommendations.

Typical Characteristics

Appearance	Pale white to amber polymer
Mooney Viscosity ¹	51
Volatiles, % wt.	1.0 max.
Ethylene, % wt.	49
Shear Stability Index of Liquid VII, %	52
Diluted Kin. Visc @ 100°C of Liquid VII	13.0 cSt
Thickening Power ² , cSt @ 100°C	8.05

Handling Information

Max Dissolving Temp: 150°C with nitrogen blanket

Shelf Life: 36 months @ ambient temperature

¹Mooney Viscosity ML 1+4, 100°C

² 1% HiTEC® 5850B in 4.95 @ 100°C oil