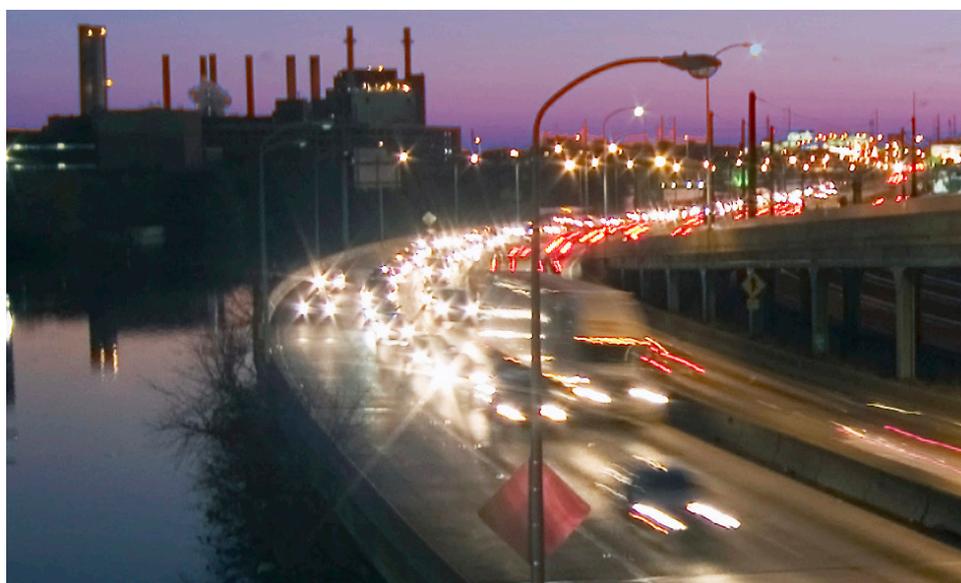


ENGINE OILS

HiTEC[®] 5835B

OCP Viscosity Index Improver



Shear Stable Solid OCP For Engine Oil Applications

HiTEC® 5835B OCP Viscosity Index Improver

Shear Stable Solid OCP For Engine Oil Applications

Key Performance Benefits

HiTEC® 5835B is a solid amorphous olefin copolymer designed for use as a Viscosity Index Improver for passenger car and heavy duty engine oils.

HiTEC® 5835B provides a broad range of customer benefits:

- Excellent balance between shear stability and thickening power efficiency
- Excellent low temperature properties
- Applicable in a wide range of base oils
- Solid form - easy to dissolve in base oils

Recommended Dosage

HiTEC® 5835B may be dissolved in a wide range of base oils at 10.0% wt. to produce a liquid HiTEC® 5835B Viscosity Index Improver.

Typical Characteristics

Properties of HiTEC® 5835B:

Appearance:	Pale white to amber polymer
Density at 15°C, g/ml:	0.875
Melt Flow Index, g/10:	2.9 max.
Ethylene Content, % wt:	51.1 max.

Properties of 10.1% wt. HiTEC® 5835B dissolved in 110N Group II base oil:

Colour, ASTM D1500:	0.3
Density at 15°C, g/ml:	0.85
Flash Point, °C (PMCC):	188
Kinematic Viscosity at 100°C, mm ² /s:	1,119
SSI ¹ (Bosch) ASTM D6278, % TP Loss:	32.6
Thickening Power ¹ at 100°C, cSt:	6.56

Handling Information

Max Dissolving Temp: 150 °C with nitrogen blanketing
Shelf Life (ambient): 60 months

Formulation Demonstrations

SAE 10W-40 Demonstration Oil

Composition	Function	% wt.
Liquid HiTEC® 5835B	VI Improver	11.7
HiTEC® 11100	DI Package	10.1
Motiva 4 Star	Base Oil	23.4
Motiva 6 Star	Base Oil	54.8
Properties		J300 Specification
Kinematic Viscosity at 100°C	12.5 - 16.3	15.72
CCS at -25°C, cP	7,000 max	6975
MRV TP-1 at -30°C, cP	60,000 max	35,521
Yield Stress, gms	–	0
HSV at 150°C & 10 ⁶ s ⁻¹ , cP	3.7 min.	4.19

SAE 5W-30 Demonstration Oil

Composition	Function	% wt.
Liquid HiTEC® 5835B	VI Improver	8.10
HiTEC® 11100	DI Package	10.10
Motiva 4 Star	Base Oil	8.90
Movita 6 Star	Base Oil	11.00
Motiva 5 Plus Star	Base Oil	61.90
Properties		J300 Specification
Kinematic Viscosity at 100°C	9.3 - 12.5	10.69
CCS at -30°C, cP	6,600 max	6484
MRV TP-1 at -35°C, cP	60,000 max	23,283
Yield Stress, gms	–	0
HSV at 150°C & 10 ⁶ s ⁻¹ , cP	2.9 min.	3.17

¹ Measured at 11.5 wt% liquid VI Improver in RO-2001 reference oil (KV100C = 4.95 cSt)

© 2019. Afton Chemical Corporation is a wholly-owned subsidiary of NewMarket Corporation (NYSE:NEU). HiTEC® is a trademark of Afton Chemical Corporation. 06/19.

The information in this bulletin is, to our best knowledge, sure and accurate, but all recommendations or suggestions are made without guarantee since the conditions of use are beyond our control. Afton Chemical Corporation and its affiliates disclaim any liability incurred in connection with the use of these data or suggestions. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.