

COMPONENTS

HiTEC[®] 5785H

Highly Shear Stable Viscosity Index Improver



For Shear Stable Multigrade Hydraulic Oils

HiTEC® 5785H Highly Shear Stable Viscosity Index Improver

For Shear Stable Multigrade Hydraulic Oils

Application

HiTEC® 5785H PMA is a viscosity index improver and pour point depressant with high shear stability. It is designed for shear stable multigrade hydraulic oils requiring high viscosity index.

Key Performance Benefits

- Superior viscosity index improvement without compromise to hydrolytic stability or filtration performance
- Oils containing HiTEC® 5785H PMA are approved by major OEMs and are on the approved Denison Parker HF-0 list
- Suitable for use in formulations designed to meet Eaton, MAG, DIN 51524 (ii), US AIST, Bosch Rexroth, SAE, ISO and JCMAS
- Provides both VI and PPD characteristics
- Soluble in Group I and Group II base oils

Recommended Dosage

Please contact your Afton Chemical representative for specific recommendations.

Typical Characteristics

Kinematic Viscosity @ 100°C, cSt	1200
Flash Point, PMCC, °C	120 min.
Specific Gravity @ 60°F/60°F	0.94

Handling Information

Max Handling Temp: 90°
 Shelf Life: 3 months @ 60-90°C
 60 months @ ambient temperature

Viscometric Performance in Group I Base Oils:

	100N Oil			150N Oil			325N Oil			600N Oil		
	0	5	10	0	5	10	0	5	10	0	5	10
Wt% HiTEC® 5785H	0	5	10	0	5	10	0	5	10	0	5	10
Viscosity at 100oC, cSt	4.10	5.46	7.34	5.2	6.94	9.2	8.00	10.32	13.2	12.24	15.09	18.80
Viscosity at 40oC, cSt	20.20	25.53	33.32	30.6	37.80	48.4	61.80	74.35	91.9	114.60	131.20	158.00
Viscosity Index	95	158	195	99	146	175	94	123	144	97.00	118	135
Pour Point, oC	-18	-45	-51	-15	-45	-48	-12	-39	-42	-6.00	-24	-30
Viscosity at -35oC, cP	---	9440	9310	---	25000	27000	---	280400	175000	---	---	---

Typical Hydraulic Formulation Examples

Components, %wt	ISO 32	ISO 46	ISO 68
	%wt	%wt	%wt
HiTEC 5785H	4.6	6.3	8.8
HiTEC 521F hydraulic additive	0.85	0.85	0.85
100 N group 1 base oil	37.29		
150N group 1 base oil	57.26	81.39	57.12
600N group 1 base oil		11.46	33.23
TOTAL	100.00	100.00	100.00
Test	Results	Results	Results
Kinematic Viscosity at 40°C, cSt	32	46	68
Kinematic Viscosity at 100°C, cSt	6.3	8.1	10.9
Viscosity Index	150	150	150
KRL After Shear viscosity			
Kinematic Viscosity at 100°C, cSt	5.7	7.2	9.3
100°C % Viscosity loss	9.5	11.1	14.7
Kinematic Viscosity at 40°C, cSt	29.5	41.7	59.9
40°C % Viscosity loss	7.8	9.3	11.9

Shear Stability

30 Cycle Bosch		20 Hr. KRL		40 Min. Sonic	
P-SSI	% Vis. Loss	P-SSI	% Vis. Loss	P-SSI	% Vis. Loss
<1	0	39	13	23	8