

DURASYN® POLYALPHAOLEFINS - OTHER PROPERTIES*

Durasyn PAO Grade	162	164	166	168	170	174	180
Kinematic Visc, cSt, -40°C	310	2626	8100	19660	37620	Solid	Solid
Kinematic Visc, cSt, -18°C	62	341	901	1605	2770	40200	203000
Kinematic Visc, cSt, 125°C	1.4	2.6	3.8	4.9	5.8	16.6	50.0
Kinematic Visc, cSt, 150°C	1.1	1.9	2.7	3.3	3.9	12.9	29.0
Kinematic Visc, cSt, 200°C	0.7	1.3	1.8	2.1	2.4	-	-
Molecular Weight Avg Value	287	443	554	629	690	1400	2000
Brookfield Visco,cP at -40°C	-	2100	6950	16290	-	-	-
Cold Cranking Simulator,cP -25°C	-	490	1300	3100	-	-	-
Vapour pressure, mm Hg							
37.8°C (100°F)	-	-	<0.00047	0.00030	0.00010	-	-
93.3°C (200°F)	-	-	0.00101	0.00062	0.00050	-	-
148.9°C(300°F)	-	-	0.0019	0.0016	0.0017	-	-
Dielectric Constant, 23°C 1.0 and 1000kHz	2.076	2.102	2.118	2.122	2.130	2.150	2.151
Refractive Index N ²⁰	1.4450	1.4554	1.4596	1.4628	-	-	-
% Transmittance at 440 nm	99	99	99	99	99	-	-
VOC (Volatile Organic Compound) g/L	13.6	1.3	-	-	-	-	-
Colour ASTM D 1500	0.5 max	0.5 max	0.5 max	0.5 max	0.5 max	-	-
Colour APHA ASTM D 1209	-	-	-	-	-	50 max	50 max
C10 monomer , % wt (GC)	1.0 max	-	-	-	-	-	-
Aniline Point ,°C (°F)	-	116.7(242)	129.6(265)	123.3(254)	132.2(270)	153.3(308)	154.4(310)
DSC, Oxidative Onset Temperature,°C	-	192	192	191	191	189	188
DSC,Energy kJ/g	-	12.1	12.4	13.8	13.6	13.8	14.6
Noack Volatility 250°C,1 hour (% wt loss)	99	13.5	6.5	3.5	2.0	0.8	0.6

* The physical properties of all the Durasyn grades of polyalphaolefin are summarized in the table above. The values quoted were obtained from samples of production materials, and are provided for guidance only. These are not intended to be specification properties.