

Grades at a Glance

Durasyn® Polyalphaolefins

DURASYN POLYALPHAOLEFIN (PAO) TYPICAL PROPERTIES¹

Durasyn PAO	162	164	164X	166	166X	168	170
Color (ASTM D1500)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K. Viscosity, cSt, 100°C	1.9	3.9	4.0	5.9	5.9	7.8	9.6
K. Viscosity, cSt, 40°C	5.5	17.2	18.2	31.0	30.8	47.5	62.9
K. Viscosity, cSt, -40°C	310	2,626	2,700	8,100	7,795	19,660	37,620
Viscosity Index	122	124	124	135	137	136	137
Pour Point, °C	<-55	<-65	<-60	<-60	<-54	<-50	<-45
Flash Point, °C	>145	>204	>204	>225	>225	>245	>250
Noack Volatility, Weight Loss 250°C	99	<14	<14	<9	<9	<4	<3.5
Specific Gravity (60/60°F)	0.801	0.818	0.820	0.827	0.830	0.832	0.836
Total Acid Number	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromine Number	<1.0	<0.4	<0.4	<0.4	<0.4	<0.4	<1.0

Durasyn PAO	125	126	127	128	145	146	147	148
Color (ASTM D1500)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K. Viscosity, cSt, 100°C	5.12	5.97	6.98	7.82	5.2	5.9	7.06	7.8
K. Viscosity, cSt, 40°C	24.7	30.6	38.1	44.5	25.3	30.4	38.8	44.1
K. Viscosity, cSt, -40°C	5,690	---	---	---	4,967	7,018	11,649	15,259
Viscosity Index	143	144	144	145	143	146	145	146
Pour Point, °C	<-40	<-37	<-35	<-33	-45	-45	-43	-39
Flash Point, °C	>215	>220	>225	>225	>225	>225	>225	>225
Noack Volatility, Weight Loss 250°C	5.5	4.5	3.0	2.3	4.9	4.9	3.2	2.9
Specific Gravity (60/60°F)	0.824	0.828	0.831	0.832	0.820	0.827	0.830	0.833
Total Acid Number	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromine Number	<0.4	<0.4	<1.0	<0.4	<0.4	<0.4	<0.4	<0.4

Durasyn PAO	174-I	180-R	180-I
Color (ASTM D1500)	<0.5	<0.5	<0.5
K. Viscosity, cSt, 100°C	50	102	134
K. Viscosity, cSt, 40°C	412	938	1,254
Viscosity Index	186	204	216
Pour Point, °C	<-35	<-20	<-20
Flash Point, °C	>265	>265	>265
Specific Gravity (60/60°F)	0.846	0.856	0.856
Total Acid Number	<0.01	<0.01	<0.01
Bromine Number	<1.0	<0.4	<0.4

- The physical properties of INEOS polyalphaolefin materials 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. Technical data sheets, safety data sheets, and additional information for all these products are available at our website: www.ineosoligomers.com or www.ineos.com

Proprietary property of INEOS Oligomers.

Technical information contained herein is furnished without charge or obligation, and is given and accepted at recipient's sole risk. Because conditions of use may vary and are beyond our control, INEOS makes no representation about, and is not responsible or liable for the accuracy or reliability of data, nor for toxicological effects or Industrial Hygiene requirements associated with particular uses of any product described herein. Nothing contained in this bulletin shall be considered a recommendation for any use that may infringe patent rights or an endorsement of any particular material not supplied by INEOS. Any properties or applications listed in this bulletin are provided as information only and in no way modify, amend, enlarge, or create any specification or warranty.