

Durasyn[®] 166 Polyalphaolefin

Durasyn[®] 166 polyalphaolefin is a hydrogenated synthetic hydrocarbon base fluid for use in fully and partially synthetic, premium, long-drain lubricating oils, industrial oils, hydraulic fluids, transmission fluids, or heat transfer fluids.

Features:

Thermal stability
Oxidation resistance
Low-temperature fluidity
Low volatility
High viscosity index

Table 1: Routinely Measured and Typical Properties

ROUTINELY MEASURED PROPERTIES	TYPICAL	TEST METHOD
Viscosity, cSt, 100°C	5.8	ASTM D-445
Viscosity, cSt, 40°C	30.7	ASTM D-445
Viscosity, cSt, -40°C	7,985	ASTM D-445
Pour Point, °C	-63	ASTM D-97
Flash Point, °C	245	ASTM D-92
Specific Gravity, 15.6/15.6°C (60/60°F)	0.827	ASTM D-4052
Bromine Number, g Br ₂ / 100 g	0.1	IP-129
Total Acid Number, mg KOH/g	<0.01	ASTM D-974
Moisture, ppm	11	ASTM D-3401
Noack Volatility, 250°C, 1hr,%wt. Evap.	6.8	CEC L 40-A-93
Color	<0.5	ASTM D1500
Appearance	Clear/bright	Observation
OTHER PROPERTIES*		
Viscosity, cSt, 125°C	3.8	ASTM D-445
Viscosity, cSt, 150°C	2.7	ASTM D-445
Viscosity, cSt, 200°C	1.8	ASTM D-445
Viscosity, cSt, -18°C	901	ASTM D-445
Viscosity Index	135	ASTM D-2270
Brookfield Viscosity, cP, -40°C	6,950	IP-267
Cold Cranking Simulator, cP, -25°C	1,300	
Density (lb/gal)	6.89	
DSC, Oxidative Onset Temperature, °C	192	
DSC, Energy kJ/g	12.4	
Dielectric Constant, 23°C, 1.0 and 1,000 KHz	2.118	
Molecular Weight	554	GC (Calculated)
Aniline Point, °C (°F)	129.6 (265)	ASTM D-611

*Note: Not a Sales Specification. Data based upon testing of randomly selected lots of product

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 document shall be considered a recommendation for any use that may infringe patent rights, or an endorsement of any particular material, equipment, service, or other item not supplied by INEOS. The "Properties" and "Applications" listed in this document are not specifications. They are provided as information only and in no way modify, amend, enlarge, or create any specification or warranty, and ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXCLUDED.

The name INEOS is a trademark of INEOS Capital Limited.