

Durasyn[®] 180 R

Durasyn 180R high viscosity polyalphaolefin is a fully synthesized and hydrogenated hydrocarbon base fluid produced from C10 linear alphaolefin feed stocks. Its engineered physical and performance properties are designed to extend the service life and enhance the performance of fully formulated lubricants operating under continuous low, high, or wide temperature range conditions.

Features and Benefits

- Inherent thermal stability** ⇒ Resistant to thermal break down under high temperature conditions.
- Inherently resistant to oxidation** ⇒ Allows the formulation of extended drain lubricants
- Engineered to be highly shear stable** ⇒ Maintains viscosity grade over extended service life
- Designed-in broad range viscometrics** ⇒ Suitable for exposure to low or high start-up or operating temperatures, or operation over wide temperature ranges

Intended Applications

Durasyn 180R is engineered for use in a wide variety of applications where the physical and performance properties of fully synthesized PAOs can be beneficial including:

- Gear Oils
- Compressor oils
- Greases
- Industrial Oils

Compatibility

Durasyn 180R has been engineered to be either a near or direct substitute for existing PAO fluids and premium quality oils. Compatibility with metals, elastomers, coatings and sealants is similar to other fully synthesized PAO base fluids. Solubility is also similar to other fully synthesized PAO base oils.

TYPICAL PROPERTIES

Property	Test Method ISO/ASTM or	Unit Value	Typical Range
Specific Gravity , 15.6°C (60°F), kg/l (LB/gal)	12185 / D4052	0.850	0.840 – 0.860
Viscosity Index	2909 / D2270	197	185 min
Viscosity , mm ² /s (cSt), 100°C (212°F)	3104 / D445	98	97.0 – 115.0
Viscosity , cSt, mm ² /s (cSt), 40°C (104°F)	3104 / D445	927.5	890 - 1080
Water , ppm,	D3401	8	50 max

Product Datasheet

DURASYN 180 R TYPICAL PROPERTIES (Continued)

Property	Test Method ISO/ASTM or	Unit Value	Typical Range
Pour Point, °C (°F)	3016 / D97	-40	-20 max
Flash Point COC, °C (°F)	2592 / D92	290	270 min
Flash Point PMC, °C (°F)	2592 / D93	258	-
Noack Volatility, 250°C, 1hr,%wt. Evap.	CEC L-40-A-93	1.2	-
Neutralizing Number (TAN), mg KOH/g	6618 / D974	0.004	<0.1 max
Bromine Number, g Br/100 g	--/ IP-129	0.2	0.4 max
Appearance		Clear/Bright	Observation
Color	D1209	<0.5	50 max
% Transmission @ 440 nm		99	>98

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