

Durasyn[®] 136

DS136 polyalphaolefin is a fully synthesized distilled and hydrogenated hydrocarbon base fluid produced from C10 linear alphaolefin feedstocks. 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

- Inherently thermally stable** ⇒ Resistant to thermal break down under non-routine high temperature excursions.
- Inherently oxidation resistant** ⇒ Extended replacement or reapplication cycles
- Engineered inherent low volatility** ⇒ Minimal top-off and reduced contamination of system components exposed to vapors
- Engineered to be highly shear stable** ⇒ Maintains viscosity grade over extended service life intervals
- 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

DS136 is engineered for use in a wide variety of applications where the physical and performance properties of fully synthesized PAOs could be beneficial including:

- High Performance low viscosity engine oils
- ATand DCT Fluids
- Hydraulic and circulating oils
- Industrial low viscosity Oils

Compatibility

DS136 has been engineered to be either near or direct substitutes for existing PAO base oils and premium quality mineral oils. Compatibility with metals, elastomers, coatings and sealants is similar to other fully synthesized PAO base oils. Solubility is also similar to other fully synthesized PAO base oils.

TYPICAL PROPERTIES

Property	Test Method ISO/ASTM or	Unit Value	Unit Range
Specific Gravity , 15.6°C (60°F), kg/l (LB/gal)	12185 / D4052	0.816	0.810 – 0.830
Water Content (ppm)	D3401	10	50 max
Viscosity Index	2909 / D2270	125	122 min
Viscosity , mm ² /s (cSt), 100°C (212°F)	3104 / D445	3.5	3.4 - 3.7
Viscosity , cSt, mm ² /s (cSt), 40°C (104°F)	3104 / D445	14.5	13.5 - 15.5
Viscosity , cSt, mm ² /s (cSt), - 40°C (104°F)	3104 / D445	1690	2000 max

TYPICAL PROPERTIES (Continued)

Property	Test Method ISO/ASTM or	Unit Value	Unit Range
Cold Cranking Simulator , mPa s (cP), -25°C -30°C -35°C	-- / D5293	TLTM TLTM 810	ND
Brookfield Viscosity @ - 40°C , mPa s (cP)	IP267	1460	ND
Pour Point , °C (°F)	3016 / D97	-70	-66 max
Flash Point , °C (°F)	2592 / D93	216	ND
Flash Point , °C (°F)	2592 / D92	227	200 min
Noack Volatility , 250°C, 1hr,%wt. Evap.	CEC L40-A93	11.5	13 max
Neutralizing Number (TAN) , mg KOH/g	6618 / D974	0.003	<0.01 max
Air Release.		<20s	ND
Bromine Number , g Br/100 g	--/ IP-129	0.1	0.4
Aniline Point , °C		119.6	ND
Appearance		Clear/Bright	
Color	2049 / D1500	<0.5	
% Transmission @ 440 nm		99	

TLTM = Too low to measure

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