INEOS Oligomers

Product Datasheet

Durasyn® 133

Durasyn 133 polyalphaolefin is a fully synthesized distilled and hydrogenated hydrocarbon base fluid produced from 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

Inherently thermally stable	⇨ Resistant to thermal break down under non-routine high temperature excursions.
	⇨ Extended replacement or reapplication cycles
Inherently oxidation resistant **Engineered inherent low volatility**	⇨ Minimal top-off and reduced contamination of system components exposed to vapors
	⇨ Maintains viscosity grade over extended service life intervals
Engineered to be highly shear stabile **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 133 is engineered for use in a wide variety of applications where the physical and performance properties of fully synthesized PAOs could be beneficial including:

- Process oils
- Automatic Transmission fluids and DCTFs
- Hydraulic and circulating oils

Compatibility

Durasyn 133 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	0.813	0.81 – 0.83
Water Content (ppm)	D3401	15	50 max .
Viscosity Index	2909 / D2270	124	122 min .
Viscosity, mm2/s (cSt), 100°C (212°F)	3104 / D445	3.36	3.2 – 3.5
Viscosity, cSt, mm2/s (cSt), 40°C (104°F)	3104 / D445	13.49	12.5 - 14.5

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TYPICAL PROPERTIES (Continued)

Property	Test Method ISO/ASTM or	Unit Value	Unit Range
Cold Cranking Simulator, mPa • s (cP),	-- / D5293		
-25°C		TLTM	N/D
-30°C		TLTM	N/D
-35°C			
Pour Point, °C (°F)	3016 / D97	-39	-33 min
Flash Point, °C (°F)	2592 / D93	206	190 min
Flash Point, °C (°F)	2592 / D92	210	200 min
Noack Volatility, 250°C, 1hr,%wt. Evap.	CEC L40-A93	18.4	19.0 max
Neutralizing Number (TAN), mg KOH/g	6618 / D974	0.002	0.01 max
Air Release,min.	IP313	<0.2	-
Bromine Number, g Br/100 g	--/ IP-129	0.2	0.40 max
Appearance		Clear/Bright	Observation
Color	2049 / D1500	<0.5	0.5 max
% Transmission @ 440 nm		>99	>99