

Product Datasheet

Durasyn[®] 128

Durasyn 128 polyalphaolefin is a fully synthesized 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.
- 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

Durasyn 128 is engineered for use in a wide variety of applications where the physical and performance properties of fully synthesized PAOs could be beneficial including:

- Reciprocating engine oils
- Gas and steam turbine oils
- Hydraulic and circulating oils
- Automatic and continuously variable transmission fluids
- Transportation and industrial gear oils

Compatibility

Durasyn 128 has been engineered to be either a near or direct substitute 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	0.833	0.831 – 0.835
Viscosity Index	2909 / D2270	145	142 - 147
Viscosity , mm ² /s (cSt), 100°C (212°F)	3104 / D445	7.82	7.70 – 8.20
Viscosity , cSt, mm ² /s (cSt), 40°C (104°F)	3104 / D445	44.5	43.5 – 48.7

TYPICAL PROPERTIES (Continued)

Property	Test Method ISO/ASTM or	Unit Value	Unit Range
Cold Cranking Simulator , mPa • s (cP), -25°C	-- / D5293	2420	NA
-30°C		3880	NA
-35°C		6530	NA
Brookfield Viscosity , mPa • s (cP), -26°C	D2983	2540	<3000
HTHS Viscosity 150°C , mPa • s (cP),	D4741	2.40	<2.6
Pour Point , °C (°F)	3016 / D97	-36 / -35	-33 max
Flash Point , (PMC) °C (°F)	2592 /D93	245/473	N/D
Flash Point , (COC) °C (°F)	2592 / D92	270 / 518	250min
Neutralizing Number (TAN), mg KOH/g	6618 / D974	<0.01	0.01 max
Noack Volatility , 250°C, 1hr,%wt. Evap.	CEC L 40-A-93	2.3	3.5 max
Bromine Number , g Br/100 g	--/ IP-129	0.08	0.20 max
Air Release 50°C , min	D 3427	<1min	NA
Surface Tension , mN/m	D 1331	31.1	NA
Color	2049 / D1500	<0.5	0.5 max
Refractive Index @ 20°C		1.462	1.4620 +/- 0.0008
% Transmission @ 440 nm		99	>98
Elastomer Compatibility	CEC L-39-T-96	ON REQUEST	NA
RE1			
RE2			
RE3			
RE4			
Oxidation Tests			
TFOUT TEST	D 4742	On request	
DSC Oxidation	CEC L-85 T 99	On request	
Oxidation test	IP 48	On request	
Oxidation Stability	IP 306	On request	

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Review the companion Material Safety Data Sheet (MSDS) for pertinent information regarding the safe use and handling of this product.

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