

## Product Datasheet

# Durasyn® 143S

**Durasyn 143S polyalphaolefin** is a fully synthesized distilled and hydrogenated hydrocarbon base fluid produced from linear alphaolefins. Its exceptional flow and thermal properties make it an ideal selection for immersion cooling systems. Its precisely engineered physical and performance characteristics are designed to extend the service life and enhance the performance of fully composed lubricants under continuous operation at low, high or wide temperatures.

### Features and Benefits

<b>Inherently thermally stable</b>	⇒ Resistant to thermal break down under non-routine high temperature excursions
<b>Inherently oxidation resistant</b>	⇒ Extended replacement or reapplication cycles
<b>Superior dielectric performance</b>	⇒ Safe cooling and insulation of electrical and electronics systems
<b>Engineered to be highly shear stable</b>	⇒ Maintains viscosity grade over extended service life intervals
<b>Designed-in broad range viscometrics</b>	⇒ Suitable for exposure to low or high start-up or operating temperatures, or operation over wide temperature ranges

### Intended Applications

Durasyn 143S is engineered for use in a wide variety of applications where the physical and performance properties of fully synthesized PAOs could be beneficial including:

- Immersion coolants
- Automotive engine oils
- Automatic and continuously variable transmission fluids
- Industrial gear oils
- Hydraulic and circulating oils

### Compatibility

Durasyn 143S 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.

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## TYPICAL PROPERTIES

Property	Test Method ISO/ASTM	Unit Value
<b>Viscosity</b> , mm <sup>2</sup> /s (cSt), 100°C	3104 / D445	3.0
<b>Viscosity</b> , mm <sup>2</sup> /s (cSt), 40°C	3104 / D445	11.7
<b>Viscosity</b> , mm <sup>2</sup> /s (cSt), -40°C	3104 / D445	1330
<b>Pour Point</b> , °C	3016 / D97	-57
<b>Flash Point</b> , °C	2592 / D92	190
<b>Neutralizing Number (TAN)</b> , mg KOH/g	6618 / D974	<0.01
<b>Bromine Number</b> , gBr <sub>2</sub> /100 g	--/ IP-129	0.02
<b>Specific Gravity</b> , 15.6°C	12185 / D4052	0.81
<b>Water</b> , ppm	D3401	5
<b>Noack Volatility</b> , 250°C, 1hr, %wt. Evap.	CEC L40-A-93	7.0
<b>Appearance</b>		C&B
<b>Color</b>	2049 / D1500	<0.5

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