# INEOS Oligomers

#### **INEOS**

Houston, Texas - USA Lyndhurst- Hamsphire- UK Singapore 238877 - Singapore

### **Product Datasheet**

## **Durasyn® 148**

**Durasyn 148 polyalphaolefin** is a fully synthesized hydrogenated hydrocarbon base fluid produced from C12 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

Inherently oxidation resistant Engineered inherent low volatility

Engineered to be highly shear stabile 

⇒ Designed-in broad range viscometrics 

⇒

- ⇒ Resistant to thermal break down under non-routine high temperature excursions.
- ⇒ Extended replacement or reapplication cycles
- ⇒ Maintains viscosity grade over extended service life intervals
- Suitable for exposure to low or high start-up or operating temperatures, or operation over wide temperature ranges

#### Intended Applications

Durasyn 148 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
- Industrial Oils

#### Compatibility

Durasyn 148 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	Typical Range
Specific Gravity, 15.6°C (60°F), kg/l (LB/gal)	12185 / D4052	0.833	0.810 - 0.840
Viscosity Index	2909 / D2270	147	142 - 147
Viscosity, mm <sup>2</sup> /s (cSt), 100°C (212°F)	3104 / D445	7.8	7.3 - 8.3
Viscosity, cSt, mm <sup>2</sup> /s (cSt), 40°C (104°F)	3104 / D445	44.2	40 – 48
Viscosity, cSt, mm <sup>2</sup> /s (cSt), - 40°C (104°F)	3104 / D445	14,011	-

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#### **DURASYN 148 TYPICAL PROPERTIES (Continued)**

Property	Test Method ISO/ASTM or	Unit Value	Typical Range
Cold Cranking Simulator, mPa • s (cP),	/ D5293	Jiii Valdo	. ypiour Hungo
-25°C -30°C -35°C		2,770 3,790 7,110	N/D N/D N/D
Pour Point, °C (°F)	3016 / D97	-45	-33 max
Flash Point, °C (°F)	2592 / D93	247	-
Flash Point, °C (°F)	2592 / D92	262	215 min
Noack Volatility, 250°C, 1hr,%wt. Evap.	CEC L40-A93	2.6	4.5 max
Neutralizing Number (TAN), mg KOH/g	6618 / D974	< 0.01	0.002-0.005
Air Release, min.		1.4	-
Bromine Number, g Br/100 g	/ IP-129	0.1	0.40 max
Aniline Point, °C		N/D	-
Appearance		Clear/Bright	Observation
Color	2049 / D1500	<0.5	0.5 max
Refractive Index @ 20°C		1.4616	-
% Transmission @ 440 nm		99	>98
Molecular Weight	GC	660	