

INEOS Oligomers

Alpha Olefin C1618

Alpha Olefin C1618, a blend of 1-Hexadecene and 1-Octadecene, is produced by Ineos Oligomers by using a modified Ziegler ethylene chain growth technology. The mixture is a clear water-white, mobile liquid.

Applications

Alpha Olefin C1618 undergoes all reactions typical of alpha olefins. Alpha Olefin C1618 can be used in the production of oxo alcohols, alkylated aromatics, epoxides, tanning oils, synthetic fatty acids, and alpha olefin sulfonates. Alpha Olefin C1618 is also used as a base fluid for synthetic drilling muds.

Typical Properties¹

Carbon Number, wt% (by GC)

C ₁₄	1
C ₁₆	57
C ₁₈	37
C ₂₀	<u>5</u>
	100

Hydrocarbon Type, wt% (by GC)

Monoolefin	99.2
Paraffin	<u>0.8</u>
	100.0

Olefin Isomers, mole% by (NMR)

Linear terminal	61
Branched terminal	32
Linear internal	<u>7</u>
	100

Other Properties

Color, APHA	5
Density at 20 °C, g/mL	0.787
Density at 68 °F, lbs/gal	6.57
Pour Point, °C	2
Flash Point, °C, (ASTM D 93)	135
Boiling Range, °C, (5%-95%)	285-316

¹Typical properties will vary within specification limits.

Transportation Mode

Alpha Olefin C1618 is stored under a nitrogen blanket. It is not corrosive to steel or aluminum. Contact with air, water or oxygen should be avoided because alpha olefins are sensitive to moisture and auto-oxidation which form impurities that can interface with subsequent reactions. Alpha olefins should be handled under a dry, inert gas atmosphere. As with all hydrocarbons, alpha olefins can form explosive mixtures with air or oxygen in certain concentrations.

Alpha Olefin C1618 is available rail tank cars, tank trailers, marine vessels and isotanks. Alpha Olefin C1618 is available in drums on special order.

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