

INEOS Oligomers

1-Octene (Alpha Olefin C8)

1-Octene, a clear water-white, mobile liquid, is produced by Ineos Oligomers by using a modified Ziegler ethylene chain growth technology. The product is 99+% olefinic.

Applications

1-Octene undergoes all typical alpha olefin reactions. It can be used as a comonomer in polyolefins and as an intermediate in the production of oxo alcohols, synthetic fatty acids, octyl mercaptans, amines, organo aluminum compounds, and hydrogenated oligomers.

Typical Properties¹

Carbon Number, wt% (by GC)

C ₆ and lighter	<0.1
C ₈	99.8
C ₁₀ and heavier	<0.2
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	100.0

Hydrocarbon Type, wt% (by GC)

Monoolefin	99.8
Paraffin	0.2
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	100.0

Olefin Isomers, mole% by (NMR)

Linear terminal	97.0
Branched terminal	2.1
Linear internal	0.9
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	100.0

Other Properties

Color, APHA	5
Water, ppm	<25
Density at 20 °C, g/mL	0.715
Density at 68 °F, lbs/gal	5.97
Flash Point, °C, (ASTM D 56)	10
Boiling Range, °C, (5%-95%)	121-123

¹Typical properties will vary within specification limits.

Transportation Mode

1-Octene is stored and shipped under a nitrogen blanket. It is not corrosive to steel or aluminum. Contact with air 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.

1-Octene is available in rail tank cars, tank trailers, marine vessels and isotanks. 1-Octene is available in drums on special order.

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