

INEOS Oligomers

1-Dodecene (Alpha Olefin C12)

1-Dodecene, 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-Dodecene enters into all reactions typical of alpha olefins.

1-Dodecene can be used in the production of alkylated aromatics, amines and amine oxides, mercaptans, oxo alcohols, epoxides, and synthetic fatty acids.

Typical Properties¹

Carbon Number, wt% (by GC)

C ₁₀	0.6
C ₁₂	98.5
C ₁₄	0.9
C ₁₆	<0.2
	<u>100.0</u>

Hydrocarbon Type, wt% (by GC)

Monoolefin	99.8
Paraffin	<u>0.2</u>
	100.0

Other Properties

Color, APHA	5
Density at 20 °C, g/mL	0.760
Density at 68 °F, lbs/gal	6.34
Pour Point, °C	-36
Flash Point, °C, (ASTM D 56)	77
Boiling Range, °C, (5%-95%)	213-216

¹Typical properties will vary within specification limits.

Transportation Mode

1-Dodecene 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.

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

Technical information contained herein is furnished without charge or obligation, and is given and accepted at recipient's sole risk. Because conditions of use may vary and are beyond our control, INEOS makes no representation about, and is not responsible or liable for the accuracy or reliability of data, nor for toxicological effects or Industrial Hygiene requirements associated with particular uses of any product described herein. Nothing contained in this document shall be considered a recommendation for any use that may infringe patent rights, or an endorsement of any particular material, equipment, service, or other item not supplied by INEOS. The "Properties" and "Applications" listed in this document are not specifications. They are provided as information only and in no way modify, amend, enlarge, or create any specification or warranty, and ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXCLUDED.

The name INEOS is a trademark of INEOS Capital Limited.