

## 1-Tetradecene (Alpha Olefin C14)

1-Tetradecene, 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-Tetradecene enters into all reactions typical of alpha olefins. 1-Tetradecene can be used in the production of amines and amine oxides, oxo alcohols, alkylated aromatics, alpha olefin sulfonates, epoxides, tanning oils and synthetic fatty acids.

## Typical Properties<sup>1</sup>

| Carbon Number, wt% (by GC)    |         |
|-------------------------------|---------|
| $C_{12}$                      | 0.9     |
| $C_{14}$                      | 98.1    |
| C <sub>16</sub>               | 1.0     |
|                               | 100.0   |
| Hydrocarbon Type, wt% (by GC) |         |
| Monoolefin                    | 99.3    |
| Paraffin                      | 0.7     |
|                               | 100.0   |
| Other Properties              |         |
| Color, APHA                   | 5       |
| Density at 20 ℃, g/mL         | 0.771   |
| Density at 68°F, lbs/gal      | 6.43    |
| Pour Point, ℃                 | -18     |
| Flash Point, ℃, (ASTM D 93)   | 104     |
| Boiling Range, ℃, (5%-95%)    | 246-253 |

<sup>&</sup>lt;sup>1</sup>Typical properties will vary within specification limits.

## **Transportation Mode**

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

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