## INEOS Oligomers

## Alpha Olefin C1416

Alpha Olefin C1416, a blend of 1-Tetradecene and 1-Hexadecene, produced by INEOS Oligomers is a clear mobile liquid at room temperature.

## Applications

Alpha Olefin C1416 is used in offshore drilling as a synthetic olefin low viscosity fluid, a base component in formulations designed to improve the performance, lubricity and wellbore stability expected from conventional mineral oil-based muds. Alpha Olefin C1416 is a blend of biodegradable and low toxicity olefin components; it may be an acceptable fluid for environmentally regulated regions.

Alpha Olefin C1416 is also used in the surfactants and detergents industry.

| Typical Properties <sup>1</sup> |           |
|---------------------------------|-----------|
| Carbon Number, wt% (by GC)      |           |
| C12                             | <1        |
| C14                             | 65        |
| C16                             | 33        |
| C20                             | <u>_1</u> |
|                                 | 100       |
| Hydrocarbon Type, wt% (by GC)   |           |
| Monoolefin                      | 99.5      |
| Paraffin                        | 0.5       |
|                                 | 100.0     |
| Olefin Isomers, mole% by (NMR)  |           |
| Linear terminal                 | 73        |
| Branched terminal               | 20        |
| Linear internal                 | 7         |
|                                 | 100       |
| Other Properties                |           |
| Color, APHA                     | 10        |
| Density at 20 ℃, g/mL           | 0.779     |
| Density at 60 °F, lbs/gal       | 6.50      |
| Pour Point, ℃                   | -12       |
| Flash Point, ℃, (ASTM D 93)     | 114       |
| Kinematic Viscosity, cSt @ 40°c | 2.09      |

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

## Transportation Mode

Alpha Olefin C1416 is stored under a nitrogen blanket. It is not corrosive to steel or aluminum. Contact with air, water or oxygen should be avoided because olefins are sensitive to moisture and auto-oxidation which form impurities that can interface with subsequent reactions. Olefins should be handled under a dry, inert gas atmosphere. As with all hydrocarbons, olefins can form explosive mixtures with air or oxygen in certain concentrations.

Alpha Olefin C1416 is available in rail tank cars, tank trailers, marine vessels and isotanks. Alpha Olefin C1416 is available in drums on special order.

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