1-Decene Market Analysis By Application (Poly Alpha Olefin (PAO), Detergent Alcohol, Polyethylene) And Segment Forecasts To 2025

Description: The global demand for the 1-decene market is expected to reach USD 1.29 billion by 2025. 1-decene (C-10), an industrially important linear alpha olefin, has observed staggering demand from synthetic lubricant manufacturers in the form of poly alpha olefin (PAO). PAO produced using 1-decene being the purest form finds high demand and the trend is expected to continue over the forecast period as well.

Desirable properties of synthetic lubricants in comparison with mineral oils such as wide range of working temperature, linear viscosity, less engine wear & tear have triggered synthetic oil demand in recent past. This fact in conjunction with increasing environmental concern regarding mineral oil is expected to foster the synthetic lubricant market over the forecast period.

Ample ethylene availability, which is an essential raw material for 1-decene production, ensures continuous raw material supply and has benefited the alpha olefin production. However, fluctuating ethylene prices have adversely affected manufacturer’s profitability.

1-decene can only be obtained through full range alpha olefin production, and this has constrained the production growth over the past. Synthetic lubricant manufacturers have developed ester based oils to cope up with the C-10 and PAO short supply. Unavailability of on purpose production processes will probably set back the market growth.

The global market is oligopolistic in nature with top three players holding over 75% of the production. Shell Chemicals, CPChem, and Ineos have concentrated on capacity expansions and thus increase their market share. Key manufacturers use their patented technology while few others such as Q-Chem, Nizhnekamskneftekhim borrow the already patented technology for full range alpha olefin production. Most of the manufacturers have integrated throughout the value chain to gain a competitive advantage as well as profitability.

Further key findings from the study suggest:

The global 1-decene market demand was 428.6 kilo tons in 2015 and is expected to reach 615.2 kilo tons by 2025, growing at a CAGR of 3.7% from 2016 to 2025

Poly alpha olefin emerged as the largest as well as the fastest growing segment. PAO is expected to consume around 70% of 1-decene demand in 2025.

Asia Pacific is anticipated to emerge as the fastest growing market and is likely to witness revenue growth at an estimated CAGR of 7.3% during the forecast period. Ample raw material availability in conjunction with increasing synthetic lubricant production in China is likely to be responsible for the regional growth.

Europe emerged as the leading regional market with demand share exceeding 40% in 2015. The presence of key alpha olefin, as well as synthetic lubricant manufacturers in the region, has helped the market penetration.

Shell Chemicals dominate the global alpha olefin and thus 1-decene market and is followed by CPChem and Ineos Oligomers

Initiatives for bio-based 1-decene production through metathesis process are likely to open new avenues over the forecast period

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