



Market Analytics: Linear Alpha Olefins - 2018

Market Analytics: Linear Alpha Olefins - 2018 is one in a series of reports published as part of Nexant's Markets & Profitability program.

Market Analytics: Linear Alpha Olefins - 2018 report provides an in-depth analysis of the alpha olefins industry including:

- Butene-1
- Hexene-1
- Octene-1
- Higher Alpha Olefins

Published: September 2018

Along with the written report, Nexant's Online Database includes supply, demand and trade analysis for 40 countries and global capacity listings updated on a monthly basis.

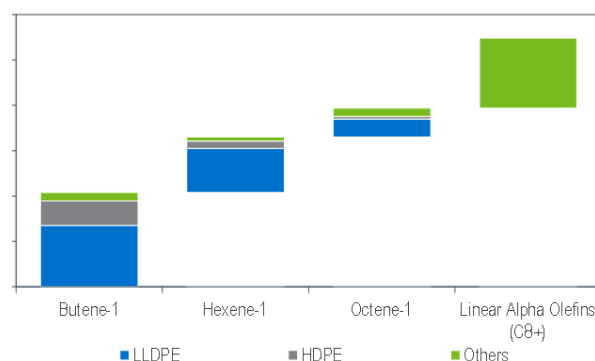
Report Abstract:

The global demand for linear alpha olefins (LAO) exceeded five million tons in 2017. Butene-1, which is sourced from both on-purpose production and full range linear alpha olefin plants is the largest of the linear alpha olefins. Linear alpha olefin demand is focused on LLDPE, which dominates, accounting for 50 percent of total demand consuming butene-1, hexene-1 and octene-1. Higher linear alpha olefins (C10+) include the production of polybutene, lubricants, plasticisers, detergent alcohols, oil field chemicals, AOS additives, fine chemicals and other miscellaneous.

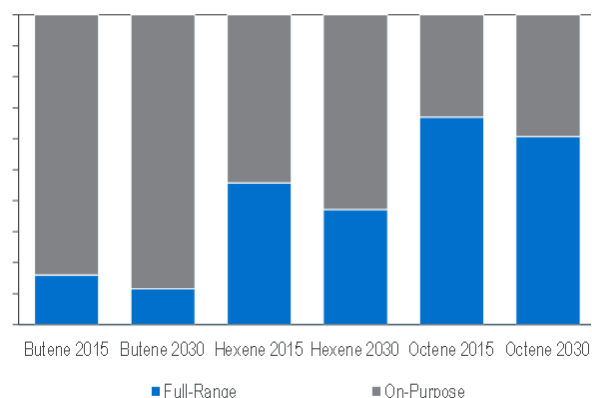
North America and Western Europe together currently represent over half of the global alpha olefin market.

While these markets are relatively mature in terms of alpha olefin use, they are dominated by the major producers and focused on innovation in alpha olefin usage. The end-use markets of these regions, e.g. polymers, lubricants and detergents, represent a high level of end-use sophistication and often serve very powerful original equipment manufacturers and major consolidated players in their respective value chains. For example, in lubricants, polyalpha olefins are made and consumed by ExxonMobil, Lubrizol, etc., while in the detergents sector major soapers such as Unilever and Proctor & Gamble dominate. However, even here the major retailers, WalMart, etc., are becoming more powerful players in the detergents value chain through private labels, and own brands, etc..

Linear Alpha Olefin Demand by Fraction, 2017-e



Alpha Olefin Production Capacity Full Range versus On-Purpose



The supply of linear alpha olefins is dominated by four major producers, Chevron Phillips, INEOS, Shell and Sasol. These companies have major presence in North America, Western Europe, Middle East and Africa. LAOs can also be produced from on-purpose plants making single fractions, e.g. butene-1 via extraction.

Operators of full range LAO plants need to optimise their plant operations in order to achieve the maximum possible value for the full range of fractions that are produced by that plant. Over the forecast period the demand for different LAO fractions is expected to grow at differing growth rates. The imbalance, especially at the lighter end occurs between a typical profile of a full range plant and the demand growth across the different fractions. The imbalance, especially in the C4 to C8 range, in part has driven the development of on-purpose technology.

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 - A. Methodology

This analysis will identify the issues shaping the industry, as well as provide an independent appraisal of the market.

Chapters 3 to 6 and Section 2.4 are segmented by key region:

- North America
- South America
- Western Europe
- Central Europe
- Eastern Europe
- Middle East
- Africa
- Asia Pacific

Each region/country is further segmented by:

- **Consumption:** Assesses historic and forecast consumption; forecasts are based on projections of end use and economic activity.
- **Supply:** Includes all producers, their production capacity, location, discussion of new projects, etc.
- **Supply, Demand and Trade:** Provides historical analysis and forecasts to 2035 of consumption, production, imports/exports, inventory build-up/decline, capacity and capacity utilization.

Subscription Details:

Subscription to **Market Analytics: Linear Alpha Olefins - 2018** includes:

- 12 month access via the Nexant website, to:
 - Unlimited downloads of PDF reports
 - Downloadable data in Excel from the Online Database
- Webinar
- Consultation time with the project team

Customized subscriptions are also available.

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The **Markets and Profitability** program comprises of the well-known Petroleum and Petrochemical Economics (PPE), PolyOlefins Planning Service (POPS), Strategic Business Analysis (SBA) and World Gas Analytics (WGAS).

Markets and Profitability tracks over 60 feedstocks, petrochemicals, polymers, chemical intermediates and fertilizers on an ongoing basis and provides regularly updated reports covering all commercial aspects of these global industries. The accompanying database, provides global analysis and forecasts in two major inter-related areas: **Markets and Profitability**.

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