



Market Analytics: Linear Alpha Olefins - 2023

Market Analytics: Linear Alpha Olefins - 2023 is one in a series of reports published as part of NexantECA's Markets & Profitability program.

Market Analytics: Linear Alpha Olefins - 2023 report provides an in-depth analysis of the following products :

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

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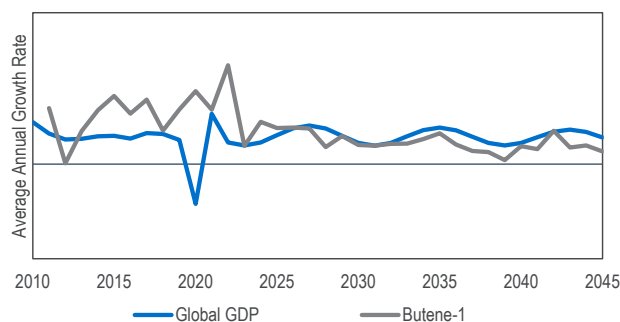
Along with the written report, NexantECA's Online Database includes supply, demand and trade analysis for 40 countries and global capacity listings updated on a monthly basis.

Report Abstract:

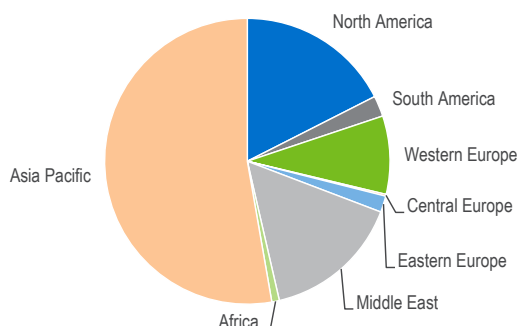
The alpha olefin business is complex. Although certain alpha olefins can be produced on-purpose, much of the production takes place using ethylene oligomerisation and as such one plant will produce a distribution of products. These products supply a wide range of very different markets. Each market behaves differently in terms of application/end-use, market size, growth, customer locations, customer size and requirements and supply chain characteristics.

This poses a number of challenges to linear alpha olefin (LAO) producers. The low carbon number components such as butene-1, hexene-1 and octene-1 are predominantly consumed in the production of polyethylene. Decene-1 is principally used to manufacture polyalpha olefins (PAOs) for the production of high performance lubricants.

Global Butene-1 Consumption Growth
million tons



Global Butene-1 Demand, 2023



Higher alpha olefins in the C12-C14 range are consumed in the production of detergent alcohols for subsequent ethoxylation, sulfonation, etc. Certain fractions, namely hexadecene-1 (C16) and octadecene-1 (C18) are used predominantly in the oilfield chemicals sector and also in the paper industry for the production of certain sizing agents. Higher fractions, greater than eicosene (C20+), are used to manufacture various speciality chemicals, including lubricant additives and speciality waxes.

The alpha olefins producers therefore must service these very different industries, which have very different economic influences and demand drivers. At any one time in the economic cycle, demand across all fractions will fluctuate. Some fractions will be long, while others will be short. This presents an even greater challenge to alpha olefins producers.



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- A. Methodology
- B. Technology

Chapters 3-6 is 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 a list of all producers, their production capacity, location, etc., and discussion of the status of new projects.
- **Supply, Demand and Trade:** Provides historical analysis and forecasts to 2045 of consumption, production, imports/exports, inventory build-up/decline, capacity and capacity utilization.

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

For related analysis, please refer to:

[Profitability and Price Forecasts: Linear Alpha Olefins Quarterly Business Analysis](#)

Subscription Details:

Subscription to **Market Analytics: Linear Alpha Olefins - 2023** includes:

- 12 month access via the NexantECA 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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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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