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# GTL SPECIALTIES: HIGH-VALUE THREAT OR OPPORTUNITY?

## Volume I: Lubricant Basestocks

*A business analysis of the opportunities and threats emerging from gas-to-liquid basestocks in the global market*

Providing accurate and independent analysis about API Group I to Group IV basestocks, including:

- Global supply and demand scenarios
- Manufacturing cost economics
- Demand forecasts
- Price forecasts
- Barriers to trade
- Competitive threats
- Supplier profiles



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## ***GTL SPECIALTIES: HIGH-VALUE THREAT OR OPPORTUNITY? Volume I: Lubricant Basestocks***

is the first comprehensive analysis of technology, market developments, manufacturing costs, prices, and forecasts on how gas-to-liquids (GTL) basestocks will likely impact the lubricant market. This study will provide subscribers with:

- An objective assessment of the advantages and disadvantages of GTL basestocks in the global market
- A clear understanding of the market potential and speed to market for GTL basestocks from 2000 to 2015
- Insights and information on what will drive the market for GTL basestocks and at what rate it will occur
- An unbiased examination of the market space GTL basestocks is expected to occupy and of the prices it will likely command
- Insights into who the leaders and laggards are expected to be in GTL basestocks
- The knowledge required to prudently adjust and fine-tune business plans to capitalize on GTL basestocks and/or mitigate its threat

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## **BACKGROUND**

The global basestock market is moving through a period of rapid change. Demand for high-quality basestocks continues to ramp up, and business executives are increasingly challenged to either invest in hydrocracking and wax isomerization technology or consider exiting the business.

The decision is complex and costly, and the stakes are very high. Adding to the complexity of the decision process is the fact that GTL basestocks are a step-change in quality and cost. Some basestock plants may have difficulty competing with GTL in performance and cost because the quality is very close to the level of polyalphaolefins (PAO), and the feed is an incremental, low-cost step in relation to refining processes.

Separating the facts from fiction and market hype and hyperbole from business realities is a daunting task. There is little question that GTL basestocks have excellent market potential, but the big questions are:

- What is the value of this potential?

- How rapidly will it develop?
- What will it cost to make?
- Who will have it?
- Who will need it?
- What are they willing to pay to get it?
- What will GTL basestocks compete with?

Although several studies have been conducted on GTL in the area of fuels, virtually nothing has been done on this very important—and comparatively high-margin—specialty products segment of the petroleum industry.

***GTL SPECIALTIES: HIGH-VALUE THREAT OR OPPORTUNITY? Volume I: Lubricant Basestocks*** provides subscribers with objective and solidly backed answers to these and other key questions about GTL and its impact on the global lubricant basestock market.

## **SCOPE**

Although the study focuses on GTL basestocks, it also examines the market for GTL basestocks within the context of API Groups I through V basestocks, which includes PAO and naphthenics.

This report acknowledges that lubricant basestock can be made by F-T synthesis using coal as feed, and this is not technically a GTL conversion. In fact, basestock can be synthesized in an F-T reaction by conversion of solids to liquids, as is the case in using coal as feed. The use of the term "GTL" in this report includes any basestock produced by F-T synthesis, regardless of the type of feed.

The base year for the supply and demand data is 2000. Qualitative insights are based on interviews conducted in 2001. The study presents supply and demand forecasts in three windows of time—2000 to 2005, 2005 to 2010, and 2010 to 2015—and under three scenarios, most likely, optimistic, and pessimistic.

The geographic scope of the study is global and includes the information listed in the table of contents on the previous page. A list of selected GTL and paraffinic basestock suppliers profiled in section 13 is provided in Table 1.

**Table 1**

**GTL SUPPLIERS PROFILED IN VOLUME I**

- British Petroleum
- ChevronTexaco
- Conoco
- ExxonMobil
- Fortum
- Idemitsu Kosan
- Japan Energy
- Marathon-Ashland Petroleum LLC
- Motiva Enterprises LLC
- Nippon Oil Corporation
- Petro-Canada Lubricants
- Shell
- Showa Shell Sekiyu
- SK Corporation
- Syntroleum Corporation
- Total Raffinage Distribution

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**METHODOLOGY**

Kline & Company's leadership role in providing high-quality market information on the global lubricants industry is based on primary research.

Although secondary sources such as the Internet, trade publications, and others were used, the primary research methodology employed in **GTL SPECIALTIES: HIGH-VALUE THREAT OR OPPORTUNITY? Volume I: Lubricant Basestocks** was telephone

interviews and personal visits with basestock producers, finished lubricant blenders and marketers, refinery technology and catalyst companies, natural gas producers, government agencies, trade associations, and other industry experts.

All interviews, analysis, and report writing was conducted by a team of Kline & Company associates with decades of experience in lubricant sales, consulting, and technical service.

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Kline's Petroleum & Energy Practice leverages over 60 years of combined experience in the petroleum, lubricant, and chemical industries to assist clients in a wide range of proprietary assignments, including:

- Business appraisals
- Competitive intelligence
- Customer satisfaction
- Manufacturing economics
- Market analysis
- Mergers and acquisitions
- Strategy development
- Technology assessment

Kline's analysis of GTL basestocks is the company's fourth major syndicated study on basestocks. In 1996, Kline completed two major syndicated studies on the basestocks business, followed by a third study released in 2001. The titles of each of the previously published studies on basestocks are as follows:

- THE CHANGING FACE OF THE LUBRICANT OIL BASESTOCK BUSINESS: THE CONOCO/PENNZOIL JOINT VENTURE
- THE CHANGING FACE OF THE LUBRICANT OIL BASESTOCK BUSINESS: NORTH AMERICA
- LUBRICANT BASESTOCKS, THE AMERICAS

In addition, Kline & Company has conducted several proprietary projects for its clients in the basestock industry. Many of these projects have been global in scope. Kline's knowledge base extends to all aspects of the industry, and its Petroleum & Energy Practice has completed assignments for basestock manufacturers, finished lubricant manufacturers and marketers, and specialty basestock suppliers.

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