

Base Oils: Market Overview and the Case for Group III

Base Oil

Current Market Trends

While domestic demand for Group I and lower-quality Group II base oil is in decline, the market price has remained steady due to the overseas demand and limited global supply. Evolving automotive regulations are becoming more prevalent, especially in the U.S., driving the rapid increase of Group III base oil imports in the U.S. and other markets. With domestic demand pivoting toward this higher-quality base oil, European and South American

Along with all of the market studies showing the market trending toward Group III base oils providing a supply incentive, an economic incentive exists with the current market, with Group III holding a substantial per-gallon premium over Group II/II+.

companies who commonly produce Group I are at a growing disadvantage long-term. The United States and Asian producing countries remain as the prominent global supply for high-quality Group II/II+, while the

Middle East and Korea have positioned themselves as the primary suppliers of Group III. In addition to the industrial shift in standards, the price benefit of producing Group III (on average \$1.00 over GII) provides more incentive for refiners to update their process into creating a Group III spec. Since the growing demand for Group III is relatively young, we still see almost no domestic production in the U.S. What is produced is typically used for internal consumption. According to recent studies by Lubes N' Greases, Group III currently makes up 13% of the current base oil market and is estimated to increase to 20% within the next five years.

Company Spotlight

Vertex Energy, Inc.
(NASDAQ:VTNR)

Starting in July 2016, Vertex Energy, Inc. entered into a joint venture with Penthol C.V. to begin importing premium-quality Group III base oil into the United States. The base oil is produced by the Abu Dhabi National Oil Company (ADNOC) and shipped to a terminal in New Orleans. With the industry raving about the quality of the Vertex-Penthol Group III and a tremendous growth in sales volume, Vertex has established a strong name in the Group III market. This could provide a sturdy foothold if Vertex were to decide to go from producing Group II+ to Group III in the future.



Behind the Rising Demand Automotive Requirements Paving the Way for Group III

The rising demand for higher-quality base oils can be directly attributed to the demand within the automotive industry for higher-quality motor oils. The industry is seeing multiple factors impact this market shift. Automotive manufacturers are producing engines that require higher-quality motor oils, which can only be made with premium base oils. These cleaner requirements are a result of growing government regulations to achieve lower emission levels and an all-around lower carbon footprint. Another contributing factor is the recent increase and forecast increase in auto sales, or more specifically, the increase in the total number of registered vehicles. From 2011 to 2017, the total number of registered vehicles increased by approximately 15 million. With overall global population growth, along with the

two biggest generations becoming old enough to drive and attaining the ability to purchase a new vehicle, this number should continue to grow at an exponential rate. Additionally, rapid development of new technology over the past decade is driving the desire to purchase a newer car with more high-

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tech features to an all-time high. With a growth rate of only .25% annually, Long Wheel Base (LWB) vehicles are not growing at the most prolific rate, but they still comprise of 50-55% of all motor vehicles. LWB vehicles include SUVs, Trucks, Minivans and Crossover vehicles. This consistency in the market is important to note due to the volume of motor oil used compared to smaller automobiles.

The average LWB vehicle has an MPG of 10 gallons less than other automobiles and requires an average of 6 quarts of motor oil per change, 20% more than smaller passenger cars. Furthermore, consumers are becoming more inclined to buy higher-quality motor oils based on the fact that these “synthetics” have a higher oil-change interval than those of lower quality, causing consumers to buy motor oils that surpass the specifications of their vehicle. While this may mean a lower total number of oil changes per year, demand for higher-quality oil will necessitate production of Group III.

