World Oilfield Chemicals

Industry Study with Forecasts for 2019 & 2024

Study #3249 | March 2015 | $6400 | 429 pages

www.freedoniagroup.com
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Growth will be driven by technological advances and a healthy level of oil and gas exploration and development, which will spur a strong rebound in oilfield chemical demand following oil price declines.

World demand to rise 6% annually through 2019

World demand for oilfield chemicals is forecast to increase 6.0 percent per year to $33 billion in 2019 as technological advances and a healthy level of oil and gas exploration and development activity drive gains. While the decline of oil prices in the second half of 2014 constituted a notable setback, the underlying factors that led to rapid growth in chemical demand will foster a strong rebound by 2019 and will continue to support gains thereafter. The best opportunities will exist for products such as advanced drilling fluids and well stimulation chemicals, which can provide benefits such as improved drilling efficiency and greater well productivity, especially in unconventional resource plays. The need for more environmentally friendly chemicals will favor products meeting stringent environmental and regulatory requirements.

Lower oil prices to benefit high value products

With high oil prices between 2011 and 2014 providing a powerful incentive for innovation in the upstream sector, the resulting development of unconventional oil and gas through horizontal drilling and hydraulic fracturing has been a main driver of rising oilfield chemical demand, especially in the US and Canada. Although advances in unconventional resource extraction activity will slow considerably, continued growth in North America and elsewhere will result from ongoing technological improvements.

The challenging oil price environment in the near term will favor advances that can reduce drilling and completion costs or improve oil and gas recovery. High value products -- such as high performance drilling fluids and well stimulation chemicals used in hydraulic fracturing -- which can help optimize the balance between costs and productivity will benefit in particular.

Drilling fluids to remain largest product segment

Drilling fluids will continue to account for the largest share of demand and will grow at a healthy pace. Drilling in offshore environments, tight and shale formations, and very deep wells have all led to the use of more advanced and higher value oil- and water-based drilling fluids, as well as well stimulation chemicals, and these factors will continue to contribute to growth. Similar challenges will also drive gains in demand for completion and workover fluids and cement and cement additives. Cement demand will be supported by the need for value-added cement slurries often used in high pressure and temperature wells, while workover fluids will see the best prospects in countries with a large and mature base of producing wells that require maintenance. Production chemicals will benefit from development of heavy or sour resources and the rising level of water production in mature fields, but will grow at a below average pace.
Asia/Pacific

Malaysia: Oilfield Chemical Demand

Demand for oilfield chemicals in Malaysia is projected to advance $105 million in 2019. Gains through the forecast period will be supported by increasing drilling activity and rising natural gas production. Deepwater projects will boost demand for drilling fluids and other chemicals, the higher costs and greater level of uncertainties will hold back higher levels of investment and activities in the market for oilfield chemicals in the country.

The development of Malaysia’s natural gas resources has been a key factor in supporting chemical consumption and is expected to provide better gains than upstream activity targeting oil.

Growth in production chemicals will result from the mature nature of many of Malaysia’s oil fields along with efforts to sustain productivity in these fields, as well as the overall reliance on offshore production in the country. However, production chemical demand will be limited to some degree by the fact that most oil produced in Malaysia is very light, sweet crude, requiring fewer chemicals overall for water treatment, corrosion prevention, and related issues. Drilling fluids are expected to remain the largest category in the Malaysian market, accounting for almost half of demand in 2019 as a reflection of the fairly high intensity of drilling relative to oil and gas output. The long term outlook for stimulation and EOR chemicals is promising, as producers are increasingly adopting these techniques to maintain production levels and boost the recovery rates of Malaysia’s limited reserves. However, these chemicals will remain the smallest category in the Malaysian market.

Domestic suppliers to the Malaysian market include Scomi Group. Scomi is active in other markets as well, including the Middle East and North Sea area. International suppliers include Baker Hughes, Halliburton, Nalco (Ecolab), and Schlumberger.

Sample Table

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<td>Production Chemicals</td>
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<td>% Malaysia</td>
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<td>3735</td>
<td>5420</td>
<td>7610</td>
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</table>

Source: The Freedonia Group, Inc.
Sample Profile & Table, & Study Coverage

Canadian Energy Services & Technology Corporation
Suite 900, 700 - 4th Avenue Southwest
Calgary, Alberta T2P 3J4
Canada
403-269-2800
http://www.canadianenergyservices.com

Revenues: US$ 879 million (2014)
Geographic Revenues: (2014, as percent of total) Canada 38% and US 62%
Employment: 1,610 (2014)

Key Products: drilling fluids, drilling fluid systems, production chemicals, fracturing chemicals, and stimulation chemicals

Canadian Energy Services & Technology (CES) specializes in the design, manufacture, and delivery of technically advanced fluids for oil and gas industries. CES mainly serves customers in Canada and the US.

The Company participates in the world oilfield chemicals through the production and sale of an extensive range of drilling fluids, drilling fluid systems, production chemicals, fracturing chemicals, and stimulation chemicals. These products are manufactured primarily by CES’ PureChem Services business (Canada) and the AES Drilling Fluids LLC and Jacam Chemical Company subsidiaries.

PureChem Services Business -- Among the drilling fluids, drilling fluid systems, and production chemicals made by the PureChem Services business are the following products: ABS40, a specialized environmentally friendly synthetic oil-based mud system; SEAL-AX, a drilling fluid system that reduces seepage and fights total losses of fluids while drilling with oil-based and water-based muds; COTTON

TABLE VII-11
MALAYSIA:
KEY INDICATORS FOR OILFIELD CHEMICAL DEMAND

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<td>Gross Domestic Product</td>
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<tr>
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<td>Active Drilling Rigs</td>
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</table>

Source: The Freedonia Group, Inc.

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World Oilfield Chemicals is a 429-page Freedonia industry study that offers historical data (2004, 2009, 2014) as well as forecasts (2019, 2024) for demand by type, world region, and for 25 countries. The study also considers market environment factors, details the industry structure, evaluates company market share and profiles 43 global industry players.
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Related Studies

**World Upstream Oil & Gas Outlook**
World upstream oil and gas activity will remain at a high level, with annual wells drilled increasing to over 115,000 in 2018. While recent crude oil price drops may limit drilling in the volatile North American market, world activity should continue to grow as many lower cost or highly productive wells remain profitable. This study analyzes activity in the 103,400-well world upstream oil and gas industry, with forecasts for 2018 and 2023 by indicator, world region, and for 16 countries. The study also considers market environment factors and profiles industry participants.

#3197................. December 2014.................. $6200

**Well Stimulation Materials**
US demand for well stimulation materials will climb 10.6 percent annually to $15.2 billion in 2018. Efforts to improve well productivity and develop unconventional resources will continue to change the product mix. Proppants are the largest material type but a variety of chemicals and other products will see strong gains. Texas will remain a key market. This study analyzes the $9.2 billion US well stimulation material industry, with forecasts for 2018 and 2023 by product and regional market. The study also evaluates company market shares and profiles industry players.

#3160................. June 2014.................... $3000

**Shale Gas & Tight Oil: Products & Services**
US demand for shale gas and tight oil products and services is forecast to rise 3.5 percent annually to $98 billion in 2017. Stimulation materials will be the fastest growing products, while completion and production will pace the services sector. The Permian basin will remain the largest play, while the Eagle Ford Shale will grow the fastest. This study analyzes the $82.2 billion US shale gas and tight oil product and service industry, with forecasts for 2017 and 2022 by product, service, US region and play. The study also evaluates company market share and profiles industry players.

#3112................. February 2014................. $5200

**World Well Stimulation Materials**
World demand for well stimulation materials will grow more than 12 percent per year to over 65 million metric tons in 2017, valued at $23 billion. Both proppants and chemicals will grow at similar annual rates. The US will remain the dominant market while demand in Canada, China, Russia and other countries will grow at a faster pace. This study analyzes the 38.8 million metric ton world well stimulation material industry, with forecasts for 2017 and 2022 by type, country and world region. The study also evaluates company market share and profiles industry players.

#3080................. December 2013.................. $6300

**Oilfield Chemicals**
US demand for oilfield chemicals is forecast to increase 2.1 percent annually through 2017 to $10.5 billion. EOR products and drilling fluid products will grow the fastest. Gains in value terms will be strong for commodity and specialty chemicals as well as gases, while demand for polymers will decline. This study analyzes the $9.5 billion US oilfield chemical industry, with forecasts for 2017 and 2022 by application and product. The study also considers market environment and technology factors, evaluates company market share and profiles industry players.

#3065................. November 2013................. $5100

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**About The Freedonia Group**

The Freedonia Group, Inc., is a leading international industry market research company that provides its clients with information and analysis needed to make informed strategic decisions for their businesses. Studies help clients identify business opportunities, develop strategies, make investment decisions and evaluate opportunities and threats. Freedonia research is designed to deliver unbiased views and reliable outlooks to assist clients in making the right decisions. Freedonia capitalizes on the resources of its proprietary in-house research team of experienced economists, professional analysts, industry researchers and editorial groups. Freedonia covers a diverse group of industries throughout the United States and other world markets. Industries analyzed by Freedonia include:

- Automotive & Transport
- Chemicals
- Construction & Building Products
- Consumer Goods
- Energy & Petroleum
- Industrial Components
- Healthcare & Life Sciences
- Machinery & Equipment
- Metals, Minerals & Glass
- Packaging
- Plastics & Other Polymers
- Security
- Services
- Textiles & Nonwovens
- Water Treatment

**Freedonia Custom Research**

Freedonia Custom Research delivers the same high quality, thorough and unbiased assessment of an industry or market as an industry study. Since the research initiative is based upon a company’s specific needs, companies harness Freedonia’s research capabilities and resources to answer unique questions. When you leverage the results of a Freedonia Custom Research engagement, you are able to obtain important answers to specific questions and issues associated with: mergers and acquisitions, new product launches/development, geographic expansion, entry into new markets, strategic business planning, and investment and funding decisions.

Freedonia Custom Research is ideal for companies seeking to make a strategic difference in the status quo and focus on future business growth. Working side by side with clients, Freedonia’s team is able to define a research project that is custom-tailored to answer specific questions and provide the basis from which a company can make informed business decisions.