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Lubricants

US Industry Study with Forecasts for **2014 & 2019**

Study #2677 | October 2010 | \$4900 | 375 pages

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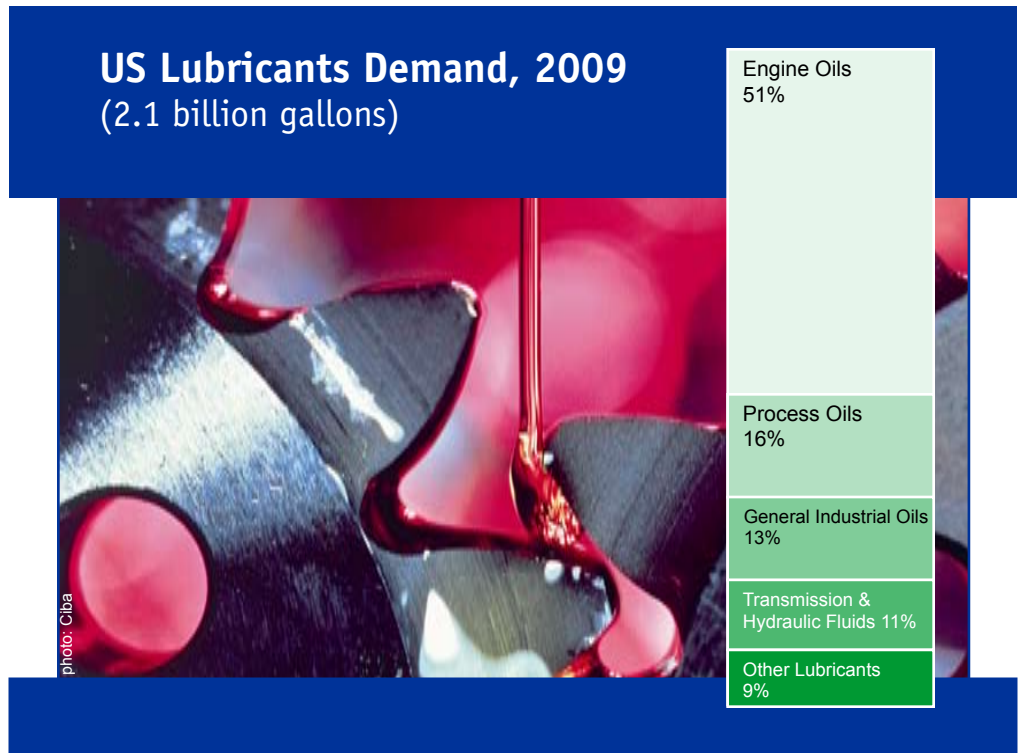
Lubricant demand will improve significantly on recent declines based in part on a turnaround in motor vehicle production and an acceleration in the number of automobiles in use.

US demand to reach 2.25 billion gallons by 2014

US demand for lubricants is forecast to expand 1.3 percent annually to 2.25 billion gallons in 2014, valued at \$22 billion. This represents a significant improvement over the performance of the 2004-2009 period, when lubricant demand declined 5.0 percent annually. Going forward, renewed economic growth will propel lubricant market gains. In particular, a turnaround in motor vehicle production, along with an acceleration in the number of automobiles in use, will support demand for automotive lubricants. Additionally, increased manufacturing output will drive demand for industrial lubricants. However, total lubricant consumption is not expected to reach pre-recession levels. This will largely be due to the greater use of longer-lasting, higher-performing synthetic lubricants that extend drain intervals, therefore reducing overall lubricant requirements in volume terms. Average price increases will continue to be significant due to expected growth in crude oil prices and a shift in product mix toward higher-value lubricants.

DIY engine oil aftermarket to lose share to DIFM

Engine oils accounted for more than half of total US lubricant demand in volume terms in 2009. A significant rebound in motor vehicle output following the double-digit annual declines of the 2004-2009 period will propel engine oil



demand in the factory fill segment. However, this represents only a small fraction of engine oil demand, and the overall outlook for these products in volume terms will be restricted by lengthening oil change intervals and the use of high performance synthetic lubricants. As such, aftermarket demand will decline, with the “do-it-yourself” segment continuing to lose out to “do-it-for-me” (DIFM) services, a trend which stalled in 2008 and 2009 as drivers sought out more economical alternatives for their vehicle service needs in the midst of difficult economic times. As the economy improves, many consumers will once again turn to professionals for their oil change needs due to the greater convenience that DIFM outlets provide.

Process oils to be fastest growing segment

Demand for process oils (e.g., white oils, rubber oils, electrical oils, ink oils, agricultural spray oils, defoamer oils) is forecast to advance at the most rapid pace. Gains will be promoted by rebounding manufacturing activity following the real (inflation-adjusted) declines of the 2004-2009 period. In particular, an improved outlook for food and beverages, chemicals, and plastics and rubber will offer good opportunities for growth. However, process oils will continue to encounter challenges brought about by changing environmental and regulatory standards.

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Sample Text, Table & Chart

PRODUCTS

Fire-Resistant Fluids

Demand for fire-resistant fluids is expected to climb in 2014, outpacing all other general lubricant categories. Stringent worker safety standards, as well as the development of improved fire-resistant fluids, as will the development of improved fire-resistant fluids compete with a variety of conventional hydraulic fluids and electrical oils.

Fire-resistant fluids are defined as lubricants which resist ignition and do not propagate flames once ignited. However, the presence of fire resistance does not mean that the fluid is nonflammable.

Fire-resistant fluids are classified by the International Organization for Standardization (ISO). Standards include oil-in-water emulsions (ISO HFA), water-in-oil emulsions (ISO HFB), polymer-in-water (ISO HFC), and synthetics (ISO HFD). Widely accepted standards of flammability classification are set by FM Approvals, a business unit of Factory Mutual Insurance Company.

Oil-in-water emulsions, or high water base fluids, contain more than 90 percent water. A typical mixture is 95 percent water and 5 percent mineral oil with additives. Because these fluids are primarily water, they are the most fire-resistant. Other advantages include cost efficiency, stability, availability and nontoxicity. However, their use is limited because of corrosiveness and poor lubricity and viscosity characteristics.

Water-in-oil emulsions are also known as invert emulsions. Their water levels are typically between 35 and 45 percent, since the fire-resistant properties are limited below 35 percent and mixtures above 45 percent show reduced antiwear properties. Advantages of invert emulsions include heat stability and compatibility with standard hydraulic fluids.

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TABLE IV-1

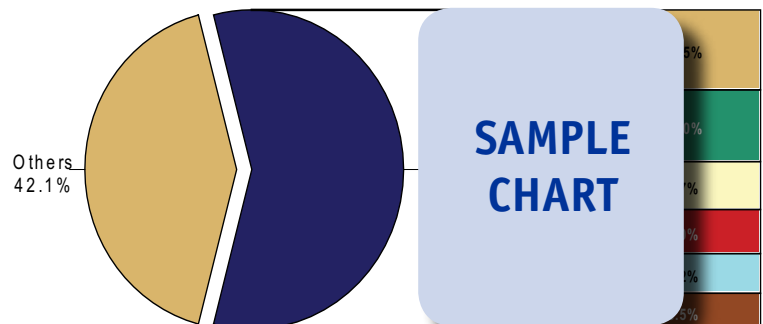
LUBRICANT DEMAND BY TYPE
(million gallons)

| Item | 1999 | 2004 | 2009 | 2014 | 2019 |
|-------------------------------------|--------|--------|--------|--------|--------|
| Gross Domestic Product (bil 2005\$) | 10,000 | 12,000 | 14,000 | 16,000 | 18,000 |
| gal lubricant/000\$ GDP | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 |
| Lubricant Demand | 0.0003 | 0.0003 | 0.0003 | 0.0003 | 0.0003 |
| Engine Oils | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| Process Oils | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| General Industrial Oils | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| Transmission & Hydraulic Fluids | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| Metalworking Fluids | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| Gear Oils | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| Greases | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| \$/gal | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| Lubricant Demand (mil \$) | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |

SAMPLE TABLE

CHART VI-1

US FINISHED LUBRICANT MARKET SHARE, 2009
(\$13.8 billion)

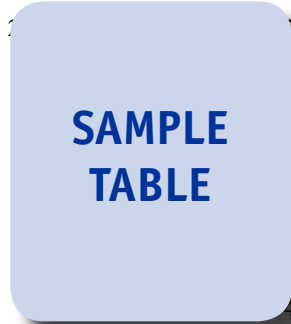


SAMPLE CHART

Sample Profile, Table & Forecast

TABLE V-7
AGRICULTURAL LUBRICANT DEMAND
(million gallons)

| Item | 1999 | 2004 | 2009 | 2014 | 2019 |
|------------------------------------|------|------|------|------|------|
| Number of Farms (000) | 2 | 2 | 2 | 2 | 2 |
| gal lubricant/farm | | | | | 4.1 |
| Agricultural Lubricant Demand | | | | | 19 |
| Transmission & Hydraulic Fluids | | | | | 65 |
| Engine Oil | | | | | 21 |
| Process Oils | | | | | 19 |
| Other | | | | | 14 |
| % agricultural | | | | | 4.8 |
| Commercial & Industrial Lubricants | | | | | 480 |



COMPANY PROFILES

San Joaquin Refining Company Incorporated

3129 Standard Street
 Bakersfield, CA 93308
 661-327-4257
<http://www.sj>

Annual Sales:
 Employment:

Key Products: ...ner oils and aromatic oils



San Joaquin Refining Company is a privately held independent oil refiner that offers a wide range of petroleum-derived products. The Company's products are employed in many applications, including lubricants, printing inks, rubber and plastics, adhesives, automotive, construction, paints and coatings, roofing, fuels and road paving.

The Company is involved in the US lubricant industry through the manufacture and supply of petroleum base oils, including HYNAP hydrotreated naphthenic base oils, RAFFENE severely solvent-refined naphthenic base oils, HYTRANS naphthenic inhibited transformer oils and RAFFEX aromatic oils. Available in several grades, HYNAP and RAFFENE oils are typically employed as rubber process and extender oils, lubricant base oils, and printing ink base oils. HYTRANS inhibited transformer oils feature hydrotreated naphthenic distillate and oxidation inhibitor chemicals. SJR's RAFFEX aromatic oils exhibit low aniline points and high aromatic content. The Company refines heavy naphthenic crude oil at a single refinery in Bakersfield, California.

"Demand for oils and lubricants used by the agricultural market is forecast to expand 1.3 percent annually to 116 million gallons in 2014, rebounding from the declines of the 2004-2009 period based on increases in total land in farms and cropland planted. Demand for transmission and hydraulic fluids, as well as process oils, will support overall gains. There will be stable demand for more environmentally friendly hydraulic fluids, drip lubricants and other products due to ..."
 --Section V, pg. 165

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OTHER STUDIES

World Oilfield Chemicals

Global oilfield chemical demand will rise 8.6% yearly through 2014, driven by a recovery in the oil and gas industry and higher oil and gas prices. North America will remain the dominant market while the Central and South American region grows the fastest. Stimulation and enhanced oil recovery chemicals will lead gains. This study analyzes the \$13.7 billion world oilfield chemical industry, with forecasts for 2014 and 2019 by product, world region and for 26 countries. It also evaluates market share and profiles industry players.

#2702December 2010 \$5900

World Biofuels

Global biofuel demand will grow 10.3% annually through 2014. Bioethanol will see the greatest gains, driven by the large North American market as well as the faster growing markets in the Asia/Pacific region and Europe. The smaller biodiesel market will be the more rapidly growing segment. This study analyzes the 74.1 million metric ton global biofuel industry, with forecasts for 2014 and 2019 by product, world region and for 28 countries. It also evaluates company market share and profiles industry participants.

#2668September 2010..... \$5900

Well Stimulation Materials

US demand for oil and gas well stimulation materials is projected to increase 14% annually through 2014. Gains will be buoyed by renewed efforts to reduce dependence on foreign energy sources. The largest segment, proppants, will also be one of the fastest growing, along with gases and other materials. This study analyzes the \$3.8 billion US well stimulation material industry, with forecasts for 2014 and 2019 by product and US regional market. It also evaluates company market share and profiles industry players.

#2636 May 2010..... \$4900

Synthetic Lubricants & Functional Fluids

US demand for synthetic lubricants and functional fluids will expand 3.2% annually through 2013. Engine oils and hydraulic and transmission fluids will grow the fastest as synthetics finally begin to penetrate the medium- and heavy-duty truck market and expand market share in the light vehicle segment. This study analyzes the \$4.1 billion US synthetic lubricant and functional fluid industry, with forecasts for 2013 and 2018 by product, material and market. It also evaluates company market share and profiles industry competitors.

#2582 March 2010..... \$4700

Soy Chemicals

US soy chemical demand will grow 7.8% annually through 2013, driven by the continued penetration of biodiesel, and by the adoption of alternatives to traditional, petrochemical-based materials in manufacturing. Soy oil derivatives such as methyl soyate, polyols, soy-based foamed plastics, waxes and fatty acids hold particularly good prospects. This study analyzes the \$1.9 billion US soy chemical industry, with forecasts for 2013 and 2018 by product and market. It also evaluates market share and profiles industry players.

#2538September 2009..... \$4700

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