Shift to “green” solvents continues

US demand for solvents will rise at a modest pace through 2020, reflecting continued economic growth, and in particular, ongoing healthy increases in construction activity. In a number of markets environmental regulations will continue to drive a shift toward “green” solvents that feature properties such as reduced emissions, lower environmental toxicity, and increased biodegradability. Public perception and consumer preference will also favor products derived from renewable resources such as plant-based alcohols, soy methyl ester, and terpenes. Further, changes in the oil and natural gas industry will impact demand, with reduced drilling rates in the near term holding back solvent consumption, and relatively low crude oil and natural gas prices providing a more competitive position for conventional solvents.

Greenhouse gas concerns expand

Environmental concerns will continue to have a significant impact on the US solvent industry. Demand for green solvents that address any of a number of potential environmental pitfalls will advance at an above average pace. While solvent users have been turning to products with lower emissions and better toxicity profiles to address tightening volatile organic compound (VOC) and hazardous air pollutant (HAP) regulations, respectively, solvents’ global warming potential will become a growing concern going forward as federal and state efforts to limit the release of greenhouse gases expand. Additionally, in some markets such as cleaning products, consumer demand for products derived from renewable resources will favor the use of plant-based alcohols and terpenes.

Soybean oil-based methyl esters & terpenes to show growth

Concerns about the impact of solvents used in oil and natural gas production on wastewater have also supported demand for soybean oil-based methyl esters and terpenes. Though solvent use by the oil and natural gas industry contracted in 2015 as the collapse in oil and natural gas prices reduced exploration activity, solvent consumption is expected to expand from the weak 2015 base going forward. Improving crude oil and natural gas prices will further impact the competitiveness of conventional solvents, which had benefited from a better cost position compared to green solvents.

Study coverage

This study examines the US solvents market. It presents historical demand data (2005, 2010 and 2015) plus forecasts (2020 and 2025) by product (alcohols, hydrocarbons, ketones, glycols, esters, chlorinated solvents, soy oil and derivatives, other) and market (printing inks, paint and coatings, cosmetics and toiletries, adhesives and sealants, cleaning products, construction, other). This study also considers market environment factors, assesses industry structure, evaluates company market share and profiles 32 US industry competitors.
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Cosmetics & Toiletries

Demand for solvents in the cosmetics and toiletries market will grow 1.3 percent per year to 692 million pounds in 2020, valued at $470 million. Increased consumer spending will help fuel a moderate rise in cosmetics and toiletries shipments. The large majority of solvent demand in this market will come from alcohol solvents, which benefit from having excellent performance capabilities and, in some cases, the ability to be used in cosmetics and toiletries products that are marketed as all-natural or green. Strong consumer demand for environmentally friendly products derived from renewable sources and that include biodegradable materials will help drive demand for green solvents, which will continue to increase their share of demand overall through the forecast period.

Alcohols are the dominant product category in the cosmetics and toiletries market, accounting for 84 percent of overall solvent consumption in 2015. Going forward, alcohol solvents will remain the leading product due in large part to their generally positive environmental profile and versatility in a range of applications. Among the alcohols, ethanol will continue to represent the largest share of solvent demand. Ethanol is used in applications such as shaving lotions, perfumes and colognes, facial scrubs, and a number of other cosmetic and toiletry products. Alcohol-based shaving lotions have declined in popularity, due in part to ethanol’s tendency to dry out skin. In perfumes and colognes, ethanol keeps fragrance components dissolved in solution. Additionally, ethanol benefits from its environmentally friendly profile. Derived from renewable raw materials, ethanol solvents will benefit from the overall industry trend toward natural products.

Isopropanol is the second most popular alcohol solvent and will continue to see healthy growth opportunities going forward. Isopropanol is used extensively in hand sanitizer products, which have increased in popularity due to increased hygiene awareness.

### TABLE IV-9

COSMETIC/TOILETRY MARKET FOR SOLVENTS (million pounds)

<table>
<thead>
<tr>
<th>Item</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cosmetics &amp; Toiletries Shpts (mil 2009$)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lb solvent/000$ cosmetics &amp; toiletries</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Cosmetics &amp; Toiletries Solvents</td>
<td></td>
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<td></td>
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<tr>
<td>By Product:</td>
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<td></td>
</tr>
<tr>
<td>Alcohols</td>
<td></td>
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<tr>
<td>Glycols</td>
<td></td>
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<tr>
<td>Ketones</td>
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<tr>
<td>Hydrocarbons</td>
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<tr>
<td>Esters</td>
<td></td>
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<tr>
<td>Conventional</td>
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<tr>
<td>Green</td>
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<td>$/lb</td>
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<tr>
<td>Cosmetic &amp; Toiletry Solvents (mil $)</td>
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<td></td>
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<tr>
<td>% cosmetics &amp; toiletries</td>
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<tr>
<td>Solvents (mil $)</td>
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</tr>
</tbody>
</table>

Source: The Freedonia Group

### TABLE III-6

ISOPROPA NOL SOLVENT DEMAND (million pounds)

<table>
<thead>
<tr>
<th>Item</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropanol Demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% solvent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isopropanol Solvents Demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleaning Products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paint &amp; Coatings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cosmetics &amp; Toiletries</td>
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<tr>
<td>Pharmaceuticals</td>
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<tr>
<td>Other</td>
<td></td>
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</tr>
<tr>
<td>$/lb</td>
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<td></td>
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</tr>
<tr>
<td>Isopropanol Solvents Demand (mil $)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>% isopropanol</td>
<td></td>
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</tr>
<tr>
<td>Alcohol Solvents Demand (mil $)</td>
<td></td>
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</tr>
</tbody>
</table>

Source: The Freedonia Group

This study can help you:

- Determine your market & sales potential
- Learn more about industry competitors
- Assess new products & technologies
- Identify firms to merge with or acquire
- Complement your research & planning
- Gather data for presentations
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**World Adhesives & Sealants**

Global demand for adhesives and sealants is forecast to rise 4.5 percent per year through 2019 to 20.2 million metric tons, valued at $64 billion. Packaging will remain the leading outlet, while construction will capture increased share. Reactive adhesives and sealants will be the fastest growing products. This study analyzes the 16.1 million metric ton world adhesives and sealants industry, with forecasts for 2019 and 2024 by product and market for six world regions and 18 major countries. The study also evaluates company market share and profiles industry players. #3377 ............... January 2016 ............... $6300

**Paint & Coatings**

US demand for paint and coatings is forecast to grow 3.8 percent annually to 1.4 billion gallons in 2019. Architecture will remain the largest market and grow the fastest. Water-based formulations will remain dominant and continue to gain market share. New technologies such as nanostructured coatings will drive future growth. This study analyzes the 1.2 billion gallon US paint and coatings industry, with forecasts for 2019 and 2024 by market, formulation and substrate. The study also evaluates company market share and profiles industry players. #3317 ............... August 2015 ............... $5300

**Construction Chemicals**

US demand for chemicals used in on-site construction will rise 6.2 percent annually through 2018 to $12.1 billion. Sprayed polyurethane foam, cement and asphalt additives, and grouts and mortars will grow the fastest. Higher value formulations will continue to gain market share in response to environmental and performance concerns. This study analyzes the $8.1 billion US construction chemical industry, with forecasts for 2018 and 2023 by product and application. The study also evaluates company market share and profiles industry players. #3239 ............... January 2015 ............... $5200

**World Industrial & Institutional (I&I) Cleaning Chemicals**

Global demand for I&I cleaning chemicals is projected to increase 4.3 percent per year to $46.3 billion in 2018. The fastest growth will occur in healthcare, due to a rise in the number of hospital stays and concerns about healthcare-associated infections (HAIs). China and the Asia/Pacific region will be the fastest growing markets. This study analyzes the $37.5 billion world I&I cleaning chemical industry, with forecasts for 2018 and 2023 by product, market, world region, and for 18 countries. The study also evaluates company market share and profiles industry participants. #3207 ............... November 2014 ............... $6300

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- Using input/output ratios, flow charts & other economic methods to quantify data
- Employing in-house analysts who meet stringent quality standards
- Interviewing key industry participants, experts & end users
- Researching a proprietary database that includes trade publications, government reports & corporate literature

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- Construction & Building Products
- Consumer Goods
- Energy & Petroleum
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- Healthcare & Life Sciences
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