Chemicals in the Built Environment
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Who is FMI

FMI Chemicals – Defined

Trends & Takeaways

FMI Chemicals M&A Experience
Privately-held firm with longstanding history of being a trusted advisor to all segments of the Built Environment, including *Chemicals*

- **175+** Professionals
- **6** Offices
- **65+** Years in Business
- **8** Specialized Industry Verticals
- **500+** Annual Client Engagements

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**FMI Capital Advisors**

- Mergers, Acquisitions, Sales & Recaps
- Private Placements (Equity/Debt)
- ESOP Advisory
- Other Financial Advisory

**FMI Consulting**

- Strategy
- Operations & Performance
- Leadership & Org. Development
- Technology & Innovation
Focus on specialty versus commodity chemicals

Focus Sectors:
- Chemicals in the Built Environment
- Diversified Specialty Chemicals
  (See following page for more detail)

Coverage Focus

Commodity Chemicals

Specialty Chemicals

- Large-cap
- Cyclical
- Capital intensive
- Requires balance sheet support
### Specialty Chemicals in the Built Environment

<table>
<thead>
<tr>
<th>Category</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesives, Sealants &amp; Coatings / Construction Chemicals</td>
<td><img src="image1" alt="Adhesives, Sealants &amp; Coatings / Construction Chemicals" /></td>
</tr>
<tr>
<td>Air &amp; Water Treatment</td>
<td><img src="image2" alt="Air &amp; Water Treatment" /></td>
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<tr>
<td>Chemical Distribution</td>
<td><img src="image3" alt="Chemical Distribution" /></td>
</tr>
<tr>
<td>Fluids &amp; Lubricants</td>
<td><img src="image4" alt="Fluids &amp; Lubricants" /></td>
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<tr>
<td>Functional Additives</td>
<td><img src="image5" alt="Functional Additives" /></td>
</tr>
<tr>
<td>Industrial Minerals &amp; Mining Chemicals</td>
<td><img src="image6" alt="Industrial Minerals &amp; Mining Chemicals" /></td>
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<tr>
<td>Natural / Renewable</td>
<td><img src="image7" alt="Natural / Renewable" /></td>
</tr>
<tr>
<td>Oilfield Chemicals</td>
<td><img src="image8" alt="Oilfield Chemicals" /></td>
</tr>
<tr>
<td>Plastics / Polymers / Resins</td>
<td><img src="image9" alt="Plastics / Polymers / Resins" /></td>
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<tr>
<td>Specialty Materials</td>
<td><img src="image10" alt="Specialty Materials" /></td>
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### Diversified Specialty Chemicals

<table>
<thead>
<tr>
<th>Category</th>
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<tbody>
<tr>
<td>Agrochemicals</td>
<td><img src="image11" alt="Agrochemicals" /></td>
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<tr>
<td>Cleaning &amp; Sanitation</td>
<td><img src="image12" alt="Cleaning &amp; Sanitation" /></td>
</tr>
<tr>
<td>Consumer Ingredients (Flavor, Fragrance, Food, Personal Care)</td>
<td>![Consumer Ingredients (Flavor, Fragrance, Food, Personal Care)]</td>
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<tr>
<td>Industrial Gases</td>
<td><img src="image13" alt="Industrial Gases" /></td>
</tr>
<tr>
<td>Pharma / Fine / Electronic Chemicals</td>
<td><img src="image14" alt="Pharma / Fine / Electronic Chemicals" /></td>
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</tbody>
</table>
Chemicals in the Built Environment | Representative Sub-Sectors

Adhesives, Sealants & Coatings / Construction Chemicals
- Adhesives & Sealants
- Asphalt Additives
- Coatings & Inks
- Concrete Admixtures
- Mortars & Grouts
- Spray Foam Insulation

Air & Water Treatment
- Activated Carbon
- Biocides
- Catalysts
- Corrosion Inhibitors
- Defoamers
- Scale Inhibitors

Chemical Distribution
- Agrochemicals
- Care
- CASE
- Food/Pharma
- Industrial/Lubricants
- Water Treatment

Fluids & Lubricants
- Auto/Aviation Lubricants
- Greases
- Hydraulic Fluids
- Industrial Lubricants
- Metalworking Fluids
- Refrigeration Lubricants

Functional Additives
- Antioxidants
- Colorants
- Flame Retardants
- Heat/Light Stabilizers
- Impact Modifiers
- Surfactants

Industrial Minerals & Mining Chemicals
- Calcium Carbonate
- Kaolin
- Quartz
- Silica
- Talc
- Titanium Dioxide

Natural / Renewable
- Botanicals
- Carbohydrates
- Pine-Derived
- Soy-Based
- Tallow
- Wood-Based

Oilfield Chemicals
- Cementing/Stimulation
- Drag Reducing Agents
- Drilling Fluids
- Production Chemicals
- Proppants
- Workover/Completion

Plastics / Polymers / Resins
- Compounds
- Elastomers
- Latex/Dispersions
- Masterbatch
- Thermoplastics
- Thermosets

Specialty Materials
- Ceramics
- Composites
- Extrusions
- Fibers/Fabrics
- Membranes
- Nonwovens
Trends and Takeaways

Specialty chemicals are critical enabling technologies in the Built Environment, with benefits broadly grouped into performance-enhancing and environmentally-friendly (sometimes both)
Trends and Takeaways | Performance-Enhancing

Specialty chemicals help improve the performance of traditional materials

Performance-Enhancing

- Protective coatings and patch/repair compounds help extend the life of aging infrastructure for a variety of substrates (concrete, pipes, etc.)
- High performance adhesives bond advanced materials in place of mechanical fasteners

Coatings & Adhesives

- Increase the strength of concrete to allow for taller buildings, more open areas (fewer walls/pillars), and increased durability
- Growing demand especially in urban areas and for infrastructure

Concrete Admixtures

- Polymeric modifiers increase pavement longevity with reduced maintenance costs
- Can improve wear resistance, skid resistance, reduce noise, and prevent softening at high temperatures

Asphalt Additives

- Impart value-added characteristics to polymers, coatings, etc.
- Heat- / light- / oxidation-stability / flame retardance
- Modify impact resistance / plasticity (harder / softer)
- Increase tack / increase lubricity / modify surface rheology

Other Functional Additives
Specialty chemicals help improve energy efficiency and lessen environmental impact

**Environmentally-Friendly**

- **Spray Foam Insulation/Sealants**
  - Function as air and water barriers in walls and on roofs
  - Increases energy efficiency and durability of structures
  - Lowers heating/cooling costs and helps meet new building codes and green building guidelines

- **Reflective Coatings**
  - Provide solar reflectance on roofs (and asphalt in urban environments) to keep buildings cooler and reduce air conditioning costs
  - Extends the life of existing structures (majority of roof coating demand from re-roofing)

- **Air & Water Treatment**
  - Remove contaminants from air & water for both health/safety/environmental and process improvement/optimization considerations
  - Addresses both municipal and industrial end-users with products and high-touch technical service

- **Natural/Renewable Chemistry**
  - Typically used for functionality attributable to the natural source (aroma, tack, etc.)
  - Often derived from waste streams (pulp & paper byproduct, tallow, etc.)
  - Accommodates consumer preference for naturally-derived products and reduces reliance on hydrocarbon sources
## FMI Chemicals Selected Recent M&A Experience

<table>
<thead>
<tr>
<th>Seller Ownership</th>
<th>Buyer Ownership</th>
<th>Segment</th>
<th>Business Description</th>
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</thead>
<tbody>
<tr>
<td>IGM</td>
<td>Astorg</td>
<td>Functional Additives</td>
<td>Photoinitiators, acrylates, and additives for UV coatings and inks</td>
</tr>
<tr>
<td>LAPOLLA</td>
<td>OTCQX:LPAD</td>
<td>Construction Chemicals</td>
<td>Spray polyurethane foam insulation and coatings for construction</td>
</tr>
<tr>
<td>EOSi</td>
<td>XPV</td>
<td>Air &amp; Water Treatment</td>
<td>Green chemicals and technical services for biological contaminant removal in water and wastewater treatment</td>
</tr>
<tr>
<td>Dow Elements PAINTS</td>
<td>NIPPON PAINT</td>
<td>Adhesives, Sealants &amp; Coatings</td>
<td>Architectural, industrial, and high-performance paints</td>
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<tr>
<td>CECA</td>
<td>ARKEMA</td>
<td>Air &amp; Water Treatment</td>
<td>Activated carbon, regeneration, diatomaceous earth, and perlite for food &amp; beverage and industrial purification</td>
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<tr>
<td>Gilbond</td>
<td>TPG</td>
<td>Adhesives, Sealants &amp; Coatings</td>
<td>High performance bonding adhesives for auto and industrial</td>
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<tr>
<td>VanDeMark</td>
<td>Verus Investment Partners, LLC</td>
<td>Pharma / Fine Chemicals</td>
<td>Specialty phosgene derivatives for pharmaceuticals, agrochemicals, polymers, and CASE</td>
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<tr>
<td>Miller</td>
<td>DUNES POINT CAPITAL</td>
<td>Agrochemicals</td>
<td>Naturally-derived crop protection and nutritional agrochemicals</td>
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<tr>
<td>Vantage Specialty Chemicals</td>
<td>The Jordan Company</td>
<td>Consumer Ingredients</td>
<td>Naturally-derived ingredients for personal care, food, consumer, and industrial</td>
</tr>
</tbody>
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* Asterisk denotes client of Managing Director, James Holmes in transaction closed prior to joining FMI Capital Advisors
James Holmes is a Managing Director and Head of the Chemicals Group with FMI Capital Advisors, FMI Corporation’s investment banking subsidiary. James specializes in sell-side and buy-side M&A, capital formation, and financial advisory services for mid-market specialty chemicals companies globally. He has extensive experience in construction chemicals, adhesives & sealants, coatings, resins & additives, air & water treatment, naturally-derived renewable chemistry, chemical distribution, and other specialty chemical subsectors.

Prior to joining FMI, James was with Houlihan Lokey in New York, where he focused on structuring and executing M&A transactions for mid-market Chemicals clients. Before Houlihan Lokey, James was a Vice President with PrinceRidge in New York, focusing on mid-market, full-service investment banking transactions for Chemicals clients. He began his career with KeyBanc Capital Markets in New York on the Chemicals team.

James earned his Bachelor of Arts degrees in Economics and German with honors from DePauw University in Greencastle, Indiana. He holds the General Securities Representative license (Series 7) and Uniform Securities Agent license (Series 63) from FINRA and NASAA.
<table>
<thead>
<tr>
<th>CITY</th>
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<tbody>
<tr>
<td>DENVER</td>
<td>210 University Blvd. Suite 800 Denver, CO 80206 303.377.4740</td>
<td>EDMONTON</td>
<td>Edmonton, AB 204.232.1373</td>
</tr>
<tr>
<td>EDMONTON</td>
<td>1301 McKinney St. Suite 2000 Houston, TX 77381 713.936.5400</td>
<td>HOUSTON</td>
<td>7639 E Pinnacle Peak Rd. Suite 100 Scottsdale, AZ 85255 602.381.8108</td>
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<tr>
<td>HOUSTON</td>
<td>223 S. West Street Suite 1200 Raleigh, NC 27603 919.787.8400</td>
<td>PHOENIX</td>
<td>4300 W. Cypress Street Suite 950 Tampa, FL 33607 813.636.1364</td>
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