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# Cement & Concrete Additives

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

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Study #2657 | July 2010 | \$4800 | 258 pages

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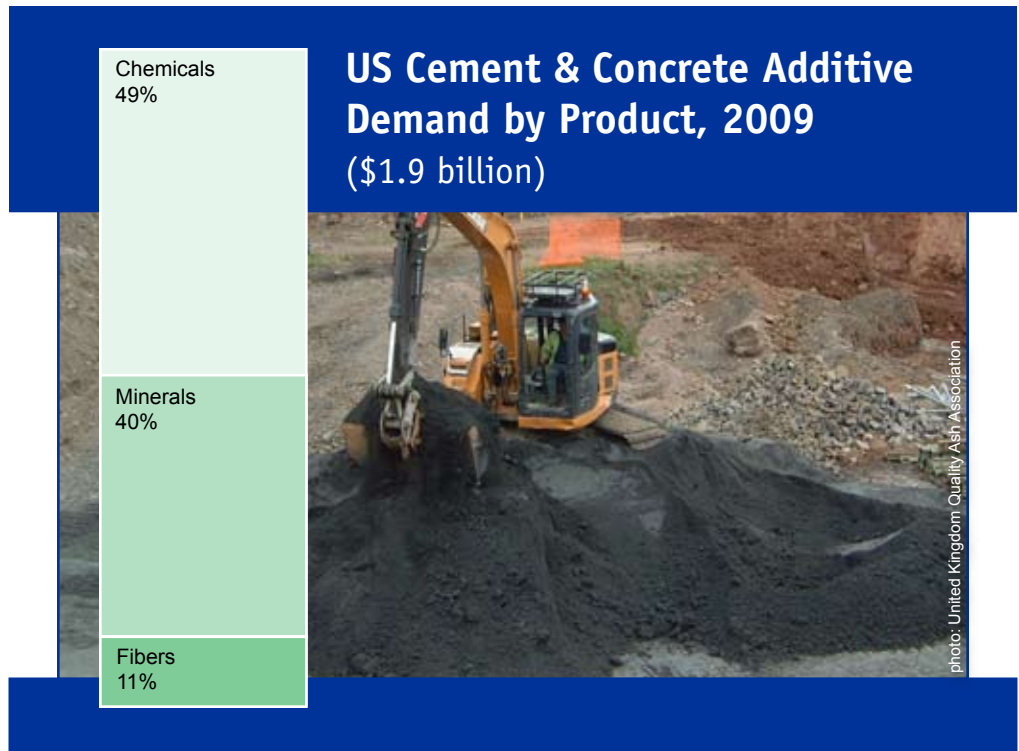
*Growth will be promoted by a rebound in the housing market, solid levels of highway and street spending, and rising use of industrial byproducts in concrete for economic and environmental reasons.*

## US demand to rise 9.9% annually through 2014

Demand for cement and concrete additives is forecast to increase at nearly double-digit rates through 2014 to \$3 billion. A rebound in the housing market will promote growth, as the residential segment is a significant outlet for components that utilize cement and concrete. Solid levels of highway and street spending will also provide gains. Demand will also benefit from rising utilization of industrial byproducts in concrete for economic and environmental reasons, as well as an increased focus on the production of durable and long-lasting concrete structures through the use of chemical and fiber additives.

## Residential buildings to be fastest growing market

Cement and concrete additives demand in residential buildings will offer the fastest growth through 2014 due to a strong rebound in the US housing market. Gains will benefit from increasing awareness of the performance advantages and placement facilitation afforded to additive-modified concrete in applications such as walls, countertops and flooring, as well as the traditional applications of driveways and patios. The nonresidential building market will post the slowest growth through 2014. Demand gains will be checked by declining construction spending in cement and concrete-intensive nonresidential building sectors, such as manufacturing plants, warehouses and hotels.



Slightly offsetting this sluggishness will be solid construction spending in the institutional sector, as more hospitals and nursing homes are built.

## Chemical additives to remain largest segment

Chemical additives will remain the largest product segment. Growth will be supported by overall increases in the use of chemical additives per ton of concrete, as users are more frequently turning to high performance, easy-to-place concrete made possible by chemical augmentation. Superplasticizers, for example, are among the chemical additives finding additional use in concrete production due to their ability to provide

more workable concrete with uncompromised performance. Demand for mineral additives will benefit as waste materials such as coal fly ash and blast furnace slag are increasingly used as a partial replacement for portland cement in concrete. Demand for fly ash and blast furnace slag will be boosted by their status as a recycled material and through their ability to reduce the pollution and energy consumption associated with cement production. Demand for fiber additives will be driven by the increased acceptance of these products among concrete producers based on their performance advantages. Synthetic fiber, for example, will benefit from expanded use as secondary reinforcements.



## Sample Text, Table & Chart

### PRODUCTS

#### Chemical Additives

Demand for chemical additives in cement and concrete to increase to \$1.9 billion in 2014. Growth supported by the use of chemical additives in concrete, a trend that is continuing to gain momentum. To-place concrete is gaining a strong position of many additives in concrete. It is estimated that the use of these will increase to \$1.9 billion in 2014. Demand. In value terms be boosted by a shift in product mix favoring higher value for at the expense of commodity products such as calcium chloride sulfonates and vinsol resins.

The largest market for chemical additives will remain building construction, an industry which will be operating from a depressed 2009 base after a sharp drop in residential construction spending. Growth through 2014 will be a considerable improvement over the decline posted in the 2004-2009 time frame, primarily due to an expected recovery in new residential construction activity, particularly in new single-family home building. Gains will also accelerate in the nonresidential building market, although in this case, growth will lag advances in the residential market, and much of the improvement will derive from increasing consumption in improvement and repair applications, in contrast to the new construction driven gains of the residential market. Chemical additives allow contractors more control over the placement of concrete, allowing for precise setting times and easier working as well as improved and aesthetic properties. Additionally, chemical additives can be used for the placement of concrete in otherwise impossible conditions, such as very cold, hot or dry weather, or even underwater.

Chemical additives demand in highway and street construction will achieve favorable gains through 2014, buoyed by increased

TABLE IV-13

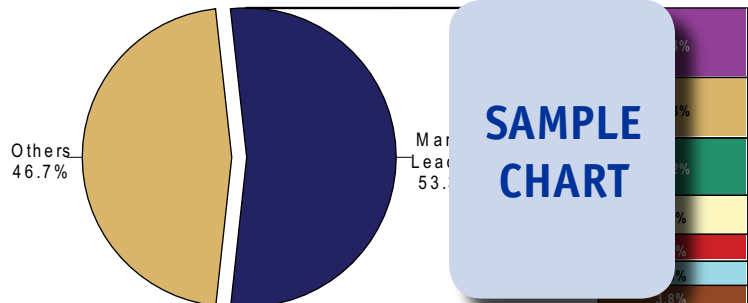
CHEMICAL ADDITIVES DEMAND IN CEMENT & CONCRETE BY TYPE

| Item                               | 1999 | 2004 | 2009 | 2014 | 2019 |
|------------------------------------|------|------|------|------|------|
| Chemical Additives Demand (mil \$) |      |      |      |      |      |
| Surfactants & Dispersants          |      |      |      |      |      |
| Inorganic Chemicals                |      |      |      |      |      |
| Other Chemicals                    |      |      |      |      |      |
| \$/lb                              |      |      |      |      |      |
| Chemical Additives Demand (mil lb) |      |      |      |      |      |
| Surfactants & Dispersants          |      |      |      |      |      |
| Inorganic Chemicals                |      |      |      |      |      |
| Other Chemicals                    |      |      |      |      |      |
| lb chemicals/ton concrete          |      |      |      |      |      |
| Concrete Demand (mil ton)          |      |      |      |      |      |

SAMPLE TABLE

CHART VI-2

CEMENT & CONCRETE ADDITIVES MARKET SHARE (\$1.9 billion, 2009)

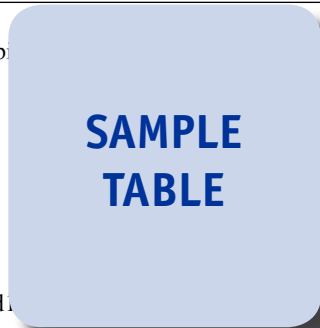


SAMPLE CHART

## Sample Profile, Table & Forecast

**TABLE V-5**  
**HIGHWAY & STREET MARKET FOR CEMENT & CONCRETE ADDITIVES**  
 (million dollars)

| Item   | 1999 | 2004 | 2009 | 2014 | 2019 |
|--|------|------|------|------|------|
| Highway & Street Construct Expend (billion \$ additive/000\$ construction) |      |      |      |      |      |
| Highway & Street Additives Demand  |      |      |      |      |      |
| Chemicals  |      |      |      |      |      |
| Minerals   |      |      |      |      |      |
| Fibers   |      |      |      |      |      |
| % highway & street Cement & Concrete Additives Demand                      |      |      |      |      |      |



**COMPANY PROFILES**

**GEO Specialty Chemicals Incorporated**  
 401 South Earl, Suite 3A  
 Lafayette, IN 47904  
 765-448-9412  
 http://www.gespecialty.com

Sales: \$1.1 billion  
 Employees: 100

**Key Products:** polycarboxylate superplasticizers, naphthalene sulfonate condensates, defoamers, water repellants, and friction reducers and grinding aids.

**SAMPLE PROFILE**

GEO Specialty Chemicals is a privately held manufacturer of over 300 specialty chemicals for water treatment, wire and cable, pulp and paper processing, oil and gas production, coatings, construction and electronics applications. The Company operates through three segments: Paints and Coatings Products, Water Treatment Chemicals, and Construction and Industrial Products.

GEO participates in the US cement and concrete additives industry through the Construction and Industrial Products segment, which is the world's leading manufacturer of naphthalene sulfonate condensates, specialty surfactants and alkylnaphthalene-based products. Applications for these products include concrete admixtures. The Company's concrete admixtures include LOMAR naphthalene sulfonate superplasticizers, DILOFLO polycarboxylate and naphthalene sulfonate superplasticizers, GEO AEA air entrainers, NOPCOTE dampproofing agents and other compounds.

LOMAR naphthalene sulfonate superplasticizers adsorb suspended particles into their hydrophobic polymer backbone-like structures.

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"Demand for cement and concrete additives used in highway and street construction and maintenance is projected to advance 10.6 percent per year to \$1.1 billion in 2014. Gains will be driven by a rebound in cement usage in highways and streets, and an increasing focus on concrete performance and reduced life cycle costs, achieved through the use of cement and concrete additives. Among additive types, mineral additives and superplasticizers will benefit from ..."  
 --Section V, pg. 148



**OTHER STUDIES**

**Brick & Block**

US demand for brick and block products is projected to increase 11.8% annually through 2014. Gains will be driven by a recovery in building construction, especially new housing. Common, glazed and other clay brick will be the fastest growing products, followed by concrete pavers. This study analyzes the 7.1 billion unit US brick and block industry, with forecasts for 2014 and 2019 by product, market, application and US region. It also evaluates company market share and profiles industry players.

#2652 ..... September 2010 ..... \$4800

**World Drywall & Building Plasters**

Global demand for drywall is forecast to advance 8.4% annually through 2014. Over four-fifths of new demand will be attributable to the US and the Asia/Pacific region. The residential market will outpace its nonresidential counterpart. Global building plaster demand will advance 5.3% annually. This study analyzes the world drywall and building plaster industry, with forecasts by product, world region and for 17 countries. It also evaluates company market share and profiles industry participants.

#2643 ..... June 2010 ..... \$5800

**World Cement**

Global cement demand will rise 4.1% yearly through 2013. Gains will be fueled by rising infrastructure investment in developing countries and improved markets in developed areas. Blended cement will increase its dominant position over portland. Ready-mix concrete will remain the fastest-growing outlet. This study analyzes the 2.8 billion metric ton world cement industry, with forecasts for 2013 and 2018 by type, market, world region and for 46 countries. It also evaluates company market share and profiles industry participants.

#2591 ..... January 2010 ..... \$6100

**World Construction Aggregates**

Global construction aggregates demand will rise 2.9% yearly through 2013. The Asia/Pacific market will lead gains and claim most new demand. More stringent environmental laws will favor recycled and secondary products such as blast furnace slag and crushed hydraulic concrete. This study analyzes the 24.9 billion metric ton world construction aggregates industry, with forecasts for 2013 and 2018 by type, market, application, world region and for 18 countries. It also evaluates company market share and profiles industry players.

#2564 ..... December 2009 ..... \$5600

**Asphalt**

US consumption of asphalt products will reach 30.8 million tons in 2013. Demand gains will derive primarily from the recovery of new residential construction from its weak 2008 levels, benefiting both roofing and paving products. The dominant paving product segment will benefit from increased government spending on highway and road construction. This study analyzes the US asphalt product industry, with forecasts for 2013 and 2018 by type, market and region. It also evaluates market share and profiles industry players.

#2544 ..... October 2009 ..... \$4800

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