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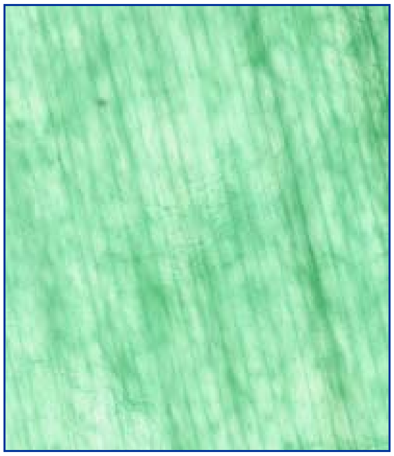

Glass Fibers

US Industry Study with Forecasts for **2013 & 2018**

Study #2505 | June 2009 | $4700 | 304 pages

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Glass Fibers

US Industry Study with Forecasts for ***2013 & 2018***

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INDUSTRY STRUCTURE

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The US glass fiber industry will be driven by efforts to lower production costs and broaden markets, with best growth anticipated for glass wool fiber (fiberglass) insulation.

US demand to rise 3.3% annually through 2013

Glass fiber demand in the US is projected to expand 3.3 percent annually to 7.2 billion pounds in 2013, valued at nearly $7 billion. The glass fiber industry will be driven by efforts to lower production costs and broaden markets. Best growth is anticipated for glass wool fiber, with textile glass fiber demand constrained by maturing markets and competition from imported fibers. Price increases of less than one percent per year are anticipated through 2013 to $0.96 per pound as a result of intense competition, adequate capacity and greater imports of lower cost materials. Textile glass fiber prices will be particularly squeezed by the impact of lower priced imports from countries in Asia, particularly China.

US Glass Fiber Demand, 2008
(6.1 billion pounds)

Fiberglass insulation to outpace textile glass

Glass wool fiber (fiberglass) insulation demand is forecast to increase 3.9 percent yearly to 4.5 billion pounds in 2013, reflecting the rebound in the residential building segment, particularly in new home building. Demand will also benefit from more intensive use of fiberglass insulation per new housing unit, sparked by concerns about energy efficiency, and fiberglass' ease of installation and favorable cost factors. Further growth will be threatened by a slumping nonresidential building market, particularly in the office and commercial segment.

Reinforced plastics to lead gains in textile glass

Textile glass fiber demand will increase at a 2.3 percent annual pace to 2.8 billion pounds in 2013. Advances will be led by reinforced applications, specifically reinforced plastics, which are forecast to expand 2.6 percent yearly to 1.2 billion pounds. Opportunities will reflect glass fibers' good mechanical properties, chemical resistance, processing versatility, and favorable price and performance criteria. Nevertheless, reinforced plastics' market expansion will require enhanced performance capabilities and processing improvements in order to replace metal and other materials in more demanding motor vehicle, aircraft and other applications. Further glass fiber use in reinforced plastic applications will be tempered by the increased use of nanomaterial reinforcements, which are becoming cost competitive and offer higher performance. Demand for textile glass fiber in other reinforced applications will increase at a 2.3 percent annual pace to 1.2 billion pounds in 2013, recovering from the declines experienced between 2003 and 2008. Gains will be fueled by above-average growth for glass fibers used in asphalt construction products such as shingles, yet constrained by limited opportunities in mature reinforced mechanical rubber product, paper, textile and other uses.

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Sample Text, Table & Chart

TABLE V-3

REINFORCED PLASTICS MARKETS FOR TEXTILE GLASS FIBERS (miilion pounds)

Item	1998	2003	2008	2013	2018
Gross Domestic Product (bil 2000$)					
lbs reinf plastic/000$ GDP					
Glass Reinforced Plastics Demand					
% glass fibers					
Textile Glass Fiber in RF Plastics					
Construction					
Motor Vehicles					
Producer Durables					
Marine					
Consumer Durables					
Aerospace & Other					
$/lb					
Textile Glass in RF Plastic (mil $)					
% reinforced plastic					
Textile Glass Fiber Demand (mil $)					2210

SAMPLE TABLE

TEXTILE GLASS FIBERS

Consumer Durables -- Consumer durables such as a sporting goods, exercise equipment, power tools and toys acc nine percent of glass fibers used in reinforced plastics in 200 tages such as corrosion resistance and low maintenance will stimulants to greater use of reinforced plastics in these applic Continued inroads are anticipated in products such as applian ponents, power tool housings, fishing rods, skis, basketball b and archery components. Factors impacting consumer durabl include general economic conditions, demographic trends, ho formations and disposable personal income levels. Demand fibers used in the production of consumer durable products is increase million pounds in 2013.

Gla astics demand will be fu availabi esin and the greater desig bilities a rmoplastic materials. Gla reinforc n the manufacture of a di of produc ding housewares, furnitur decorative moldings, cabinet doors, lawn and garden equipment, bicycle components, sporting goods, drapery hardware, shoe heels and handheld power tool housings.

SAMPLE TEXT

Demand for glass fiber reinforced thermosets in consumer durables will be threatened by mature applications and competition from reinforced and unreinforced grades of thermoplastic resins. In appliance and other applications, thermosets are at a weight disadvantage compared to thermoplastics. Glass fiber reinforced thermosets are used in the production of indoor and outdoor furniture; power tools; garden tools and equipment; appliance components; microwave cookware; and recreational equipment including bicycles, golf club shafts, tennis, squash, badminton and table tennis racquets, skis and ski poles, snowboards, fishing rods, and lacrosse and hockey sticks. In higher performing

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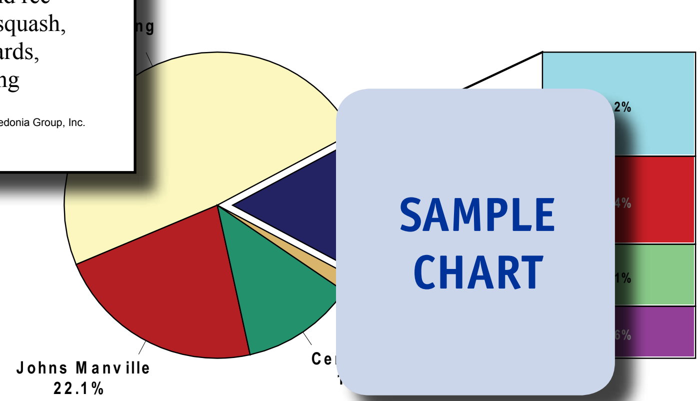
CHART VI-1

US GLASS FIBER MARKET SHARE, 2008 ($5.7 billion)



SAMPLE CHART

Glass Fibers

US Industry Study with Forecasts for ***2013 & 2018***

Sample Profile, Table & Forecast

TABLE IV-3

GLASS WOOL FIBER DEMAND BY MARKET
(million pounds)

Item	1998	2003	2008	2013	2018
Building Construction (bil 2000$)					
lbs glass wool/000$ construction					
Glass Wool Fiber Demand					
Residential Construction					
Nonresidential Construction					
Industrial & Equipment					
Appliances & Other					
$/lb					
Glass Wool Fiber Demand (mil $)					
% glass wool					
Glass Fiber Demand (mil $)					

SAMPLE TABLE

COMPANY PROFILES

Interplastic Corpororation
1225 Willow Lake Boulevard
St. Paul, MN 55110
651-481-6860
http://www.interplastic.com

Annual Sales:
Employment:

Key Products ... ester resins, and sheet mol... s and fiberglass reinforcement...

SAMPLE PROFILE

Interplas... distributes synthetic resins and composite products. The Company operates through three divisions: Thermoset Resins, Molding Products and North American Composites.

The Company is involved in the US glass fiber industry through all three divisions. The Thermoset Resins division manufactures SILMAR polyester resins, as well as COREZYN isophthalic and orthophthalic polyester and vinyl ester resins, gel coats and colorants. SILMAR polyester resins are used to manufacture cultured marble, onyx, granite effect and engineered stone products primarily for interior furnishing applications. These products are available in fiberglass-reinforced varieties, and are designed to offer enhanced color consistency, air release, thermal shock and other properties. The division's SILMAR resins are manufactured at plants in Fort Wright, Kentucky and Hawthorne, California.

COREZYN isophthalic and orthophthalic polyester and vinyl ester resins from the Thermoset Resins division are made in fiber-reinforced

257

"Fiberglass insulation demand in residential construction markets is expected to increase 5.9 percent yearly to 3.2 billion pounds in 2013, valued at $2.8 billion. This constitutes a significant improvement over the 2003 - 2008 period, when demand suffered from the collapse of the new home building industry and continued declines in manufactured housing shipments. Going forward, home construction activity is expected to recover from unusually low 2008 levels, positively impacting growth in demand for fiberglass insulation. The greatest gains will occur in ..."
--Section IV, pg. 85

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Other Studies

World Siding (Cladding)

This study analyzes the world siding industry. It presents historical demand data for 1998, 2003 and 2008 and forecasts to 2013 and 2018 by siding product (e.g., brick and tile, stucco and EIFS, concrete and stone, fiber cement, vinyl, metal, wood), market (e.g., residential buildings, nonresidential buildings, new construction, improvement and repair), world region and major country. The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry players.

#2498 .... 06/2009.................... $5800

Reinforced Plastics

US demand for reinforced plastics will reach 3.6 billion pounds in 2013. Glass fibers will remain the dominant reinforcement material while carbon fiber and nanomaterial reinforcements grow faster. Reinforced thermosets will remain the largest resin type, with growth slightly outpaced by thermoplastics. This study analyzes the 3.2 billion pound US reinforced plastics industry, with forecasts for 2013 and 2018 by reinforcement, resin and market. It also evaluates market share and profiles industry players.

#2489 .... 05/2009.................... $4600

World Insulation

Global insulation consumption is projected to grow 3.8% yearly through 2012. The fastest growth will occur in developing Asian countries based on strong building construction activity and increasing production of insulated products. Foamed plastic will remain the largest segment while fiberglass gains market share. This study analyzes the $29.2 billion world insulation industry, with forecasts for 2012 and 2017 by material, market, world region and for 46 countries. It also evaluates company market share and profiles major players.

#2434 .... 02/2009.................... $5800

Engineering Plastics

US engineering plastic demand will rise 3.1% yearly through 2012, driven by the ongoing replacement of metal parts with high-performance plastic. ABS, polycarbonate and nylon will stay the largest volume types, with polycarbonate leading gains based on opportunities in motor vehicles, medical products and construction. This study analyzes the 4.7 billion pound US engineering plastic industry, with forecasts for 2012 and 2017 by resin and market. It also evaluates company market share and profiles industry players.

#2404 .... 10/2008.................... $4600

Insulation

US insulation demand will rise 5.3% annually through 2012, based on renewed growth in housing construction. Fiberglass will remain the leading insulation material and outpace demand for the second largest type, foamed plastic. Reflective insulation and radiant barriers will see the fastest growth, albeit from a small base. This study analyzes the $8.5 billion US insulation industry, with forecasts for 2012 and 2017 by product, market and US region. It also evaluates company market share and profiles major players.

#2302 .... 03/2008.................... $4600

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