



[CLICK TO VIEW](#)

[Table of Contents 2](#)

[List of Tables & Charts 3](#)

[Study Overview 4](#)

[Sample Text, Table & Chart 5](#)

[Sample Profile, Table & Forecast 6](#)

[Order Form 7](#)

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World Activated Carbon

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

Study #2626 | June 2010 | \$5900 | 379 pages

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Table of Contents

EXECUTIVE SUMMARY

MARKET ENVIRONMENT

| | |
|---|----|
| General | 4 |
| Global Macroeconomic Environment | 5 |
| Recent Historical Trends | 5 |
| World Economic Outlook | 7 |
| World Fixed Investment Overview | 11 |
| World Demographic Overview | 13 |
| World Population Outlook | 14 |
| World Urbanization Patterns | 15 |
| World Manufacturing Outlook | 17 |
| Nonagricultural Water Use Trends | 19 |
| World Food & Beverage Outlook | 21 |
| Food | 22 |
| Beverages | 24 |
| World Sweeteners Overview | 26 |
| World Pharmaceuticals Overview | 27 |
| World Motor Vehicle Outlook | 29 |
| Environmental & Regulatory Issues | 32 |

SUPPLY & DEMAND

| | |
|---------------------------------|----|
| General | 34 |
| Capacity by Region | 35 |
| Regeneration Trends | 37 |
| Regeneration Capacity | 39 |
| Demand by Region | 42 |
| Production by Region | 46 |
| International Trade Flows | 47 |

PRODUCT & MARKET OVERVIEW

| | |
|--|----|
| General | 50 |
| Demand by Type | 51 |
| Powdered Activated Carbon | 54 |
| Granular Activated Carbon | 56 |
| Other Activated Carbon Products | 58 |
| Demand by Application | 61 |
| Liquid Phase Applications | 62 |
| Gas Phase Applications | 64 |
| Demand by Market | 66 |
| Industrial | 68 |
| Air Purification | 69 |
| Other Industrial | 72 |
| Water Treatment | 75 |
| Drinking Water | 77 |
| Other Water Treatment | 80 |
| Food & Beverage Processing | 82 |
| Sweetener Processing | 84 |
| Other Food & Beverage Processing | 86 |
| Motor Vehicles | 88 |
| Pharmaceutical & Medical | 91 |
| Other Markets | 92 |

NORTH AMERICA

| | |
|-----------------------|-----|
| General | 96 |
| Supply & Demand | 98 |
| Markets | 100 |
| United States | 102 |
| Canada | 117 |
| Mexico | 124 |

WESTERN EUROPE

| | |
|----------------------------|-----|
| General | 131 |
| Supply & Demand | 133 |
| Markets | 135 |
| France | 137 |
| Germany | 143 |
| Italy | 150 |
| Spain | 156 |
| United Kingdom | 161 |
| Other Western Europe | 168 |

ASIA/PACIFIC

| | |
|--------------------------|-----|
| General | 174 |
| Supply & Demand | 176 |
| Markets | 178 |
| Australia | 180 |
| China | 186 |
| India | 195 |
| Indonesia | 203 |
| Japan | 208 |
| South Korea | 217 |
| Taiwan | 224 |
| Other Asia/Pacific | 231 |

OTHER REGIONS

| | |
|-------------------------------------|-----|
| Central & South America | 238 |
| General | 238 |
| Supply & Demand | 240 |
| Markets | 242 |
| Brazil | 244 |
| Other Central & South America | 249 |
| Eastern Europe | 254 |
| General | 254 |
| Supply & Demand | 257 |
| Markets | 258 |
| Russia | 260 |
| Other Eastern Europe | 266 |
| Africa/Mideast | 272 |
| General | 272 |
| Supply & Demand | 274 |
| Markets | 276 |

INDUSTRY STRUCTURE

| | |
|---|-----|
| General | 279 |
| Industry Composition & Market Share | 279 |
| Industry Restructuring | 285 |
| Cooperative Agreements | 286 |
| Manufacturing Technology | 289 |
| Feedstocks | 291 |
| Production Technology | 293 |
| Manufacturing Trends | 296 |
| Marketing & Distribution | 297 |
| Competitive Strategies | 298 |

COMPANY PROFILES

| | |
|--------------------------------------|-----|
| ADA-ES Incorporated | 301 |
| Albemarle Corporation | 303 |
| Arkema SA | 305 |
| Calgon Carbon | 307 |
| Carbon Activated | 315 |
| Carbon Resources | 316 |
| CPL Carbon Link | 318 |
| Datong HuiBao Activated Carbon | 320 |
| Desotec Activated Carbon NV-SA | 321 |
| Donau Chemie | 323 |
| Futamura Chemical | 325 |
| Grupo Clarimex | 327 |

| | |
|--|-----|
| Hayleys plc | 329 |
| Indo German Carbons | 331 |
| International Chemical | 333 |
| Jacobi Carbons | 336 |
| Kuraray Company | 338 |
| Kureha Corporation | 340 |
| MAST Carbon | 341 |
| MeadWestvaco Corporation | 342 |
| Ningxia Huahui Activated Carbon | 345 |
| Norit NV | 346 |
| Osaka Gas | 351 |
| Pacific Activated Carbon | 353 |
| PT Intan Prima | 355 |
| Shanxi Xinhua Chemical | 356 |
| Shenhua Ningmei Activated Carbon | 357 |
| Shinkwang Chemical | 358 |

List of Tables/Charts

EXECUTIVE SUMMARY

| | |
|-----------------------|---|
| 1 Summary Table | 3 |
|-----------------------|---|

MARKET ENVIRONMENT

| | |
|---|----|
| 1 World Gross Domestic Product by Region | 11 |
| 2 World Fixed Investment by Region | 13 |
| 3 World Population by Region | 15 |
| 4 World Urban Population by Region | 17 |
| 5 World Manufacturing Value Added by Region | 18 |
| 6 World Nonagricultural Water Use by Region | 21 |
| 7 World Food & Beverage Manufacturing Value Added by Region | 22 |
| 8 World Pharmaceutical Shipments by Region | 29 |
| 9 World Motor Vehicle Production by Region | 32 |

SUPPLY & DEMAND

| | |
|---|----|
| Cht World Activated Carbon Production Capacity by Region, 2009 | 37 |
| 1 World Activated Carbon Demand by Region | 43 |
| Cht Activated Carbon Per Capita/GDP Per Capita Relationship, 2009 | 45 |
| 2 World Activated Carbon Production by Region | 47 |
| 3 World Activated Carbon Net Exports by Region | 49 |

PRODUCT & MARKET OVERVIEW

| | |
|---|----|
| 1 World Activated Carbon Demand by Type | 53 |
| Cht World Activated Carbon Demand by Type, 2009 | 53 |
| 2 World Powdered Activated Carbon Demand by Region | 55 |
| 3 World Granular Activated Carbon Demand by Region | 58 |
| 4 World Other Activated Carbon Product Demand by Region | 61 |
| 5 World Activated Carbon Demand by Application | 62 |
| 6 World Liquid Phase Activated Carbon | |

List of Tables/Charts

(continued from previous page)

| | |
|---|----|
| Cht World Activated Carbon Demand by Market, 2009..... | 67 |
| 7 World Gas Phase Activated Carbon Demand by Region..... | 65 |
| 8 World Activated Carbon Demand by Market..... | 67 |
| 9 World Industrial Markets for Activated Carbon..... | 69 |
| 10 World Air Purification Markets for Activated Carbon..... | 72 |
| 11 World Other Industrial Markets for Activated Carbon..... | 75 |
| 12 World Water Treatment Markets for Activated Carbon..... | 77 |
| 13 World Drinking Water Markets for Activated Carbon..... | 80 |
| 14 World Other Water Treatment Markets for Activated Carbon..... | 82 |
| 15 World Food & Beverage Processing Markets for Activated Carbon..... | 83 |
| 16 World Sweetener Processing Markets for Activated Carbon..... | 86 |
| 17 World Other Food & Beverage Processing Markets for Activated Carbon..... | 88 |
| 18 World Motor Vehicle Markets for Activated Carbon..... | 90 |
| 19 World Pharmaceutical & Medical Markets for Activated Carbon..... | 92 |
| 20 World Other Markets for Activated Carbon..... | 95 |

NORTH AMERICA

| | |
|---|-----|
| 1 North America -- Activated Carbon Market Environment..... | 98 |
| 2 North America -- Activated Carbon Supply & Demand..... | 100 |
| 3 North America -- Activated Carbon Demand by Application & Market..... | 102 |
| 4 United States -- Activated Carbon Market Environment..... | 105 |
| 5 United States -- Activated Carbon Supply & Demand..... | 107 |
| 6 United States -- Activated Carbon Demand by Application & Market..... | 108 |
| 7 Canada -- Activated Carbon Market Environment..... | 119 |
| 8 Canada -- Activated Carbon Supply & Demand..... | 121 |
| 9 Canada -- Activated Carbon Demand by Application & Market..... | 123 |
| 10 Mexico -- Activated Carbon Market Environment..... | 126 |
| 11 Mexico -- Activated Carbon Supply & Demand..... | 128 |
| 12 Mexico -- Activated Carbon Demand by Application & Market..... | 130 |

WESTERN EUROPE

| | |
|--|-----|
| 1 Western Europe -- Activated Carbon Market Environment..... | 133 |
| 2 Western Europe -- Activated Carbon Supply & Demand..... | 135 |
| 3 Western Europe -- Activated Carbon Demand by Application & Market..... | 137 |
| 4 France -- Activated Carbon Market Environment..... | 139 |

| | |
|---|-----|
| 5 France -- Activated Carbon Supply & Demand..... | 141 |
| 6 France -- Activated Carbon Demand by Application & Market..... | 143 |
| 7 Germany -- Activated Carbon Market Environment..... | 146 |
| 8 Germany -- Activated Carbon Supply & Demand..... | 148 |
| 9 Germany -- Activated Carbon Demand by Application & Market..... | 150 |
| 10 Italy -- Activated Carbon Market Environment..... | 153 |
| 11 Italy -- Activated Carbon Supply & Demand..... | 154 |
| 12 Italy -- Activated Carbon Demand by Application & Market..... | 156 |
| 13 Spain -- Activated Carbon Market Environment..... | 158 |
| 14 Spain -- Activated Carbon Supply & Demand..... | 159 |
| 15 Spain -- Activated Carbon Demand by Application & Market..... | 161 |
| 16 United Kingdom -- Activated Carbon Market Environment..... | 164 |
| 17 United Kingdom -- Activated Carbon Supply & Demand..... | 165 |
| 18 United Kingdom -- Activated Carbon Demand by Application & Market..... | 168 |
| 19 Other Western Europe -- Activated Carbon Market Environment..... | 170 |
| 20 Other Western Europe -- Activated Carbon Supply & Demand..... | 171 |
| 21 Other Western Europe -- Activated Carbon Demand by Application & Market..... | 173 |

ASIA/PACIFIC

| | |
|--|-----|
| 1 Asia/Pacific -- Activated Carbon Market Environment..... | 176 |
| 2 Asia/Pacific -- Activated Carbon Supply & Demand..... | 178 |
| 3 Asia/Pacific -- Activated Carbon Demand by Application & Market..... | 180 |
| 4 Australia -- Activated Carbon Market Environment..... | 182 |
| 5 Australia -- Activated Carbon Supply & Demand..... | 184 |
| 6 Australia -- Activated Carbon Demand by Application & Market..... | 186 |
| 7 China -- Activated Carbon Market Environment..... | 189 |
| 8 China -- Activated Carbon Supply & Demand..... | 191 |
| 9 China -- Activated Carbon Demand by Application & Market..... | 195 |
| 10 India -- Activated Carbon Market Environment..... | 198 |
| 11 India -- Activated Carbon Supply & Demand..... | 200 |
| 12 India -- Activated Carbon Demand by Application & Market..... | 203 |
| 13 Indonesia -- Activated Carbon Market Environment..... | 205 |
| 14 Indonesia -- Activated Carbon Supply & Demand..... | 207 |
| 15 Indonesia -- Activated Carbon Demand by Application & Market..... | 208 |
| 16 Japan -- Activated Carbon Market Environment..... | 211 |
| 17 Japan -- Activated Carbon Supply & Demand..... | 213 |
| 18 Japan -- Activated Carbon Demand by Application & Market..... | 216 |

| | |
|---|-----|
| 19 South Korea -- Activated Carbon Market Environment..... | 219 |
| 20 South Korea -- Activated Carbon Supply & Demand..... | 221 |
| 21 South Korea -- Activated Carbon Demand by Application & Market..... | 224 |
| 22 Taiwan -- Activated Carbon Market Environment..... | 227 |
| 23 Taiwan -- Activated Carbon Supply & Demand..... | 229 |
| 24 Taiwan -- Activated Carbon Demand by Application & Market..... | 231 |
| 25 Other Asia/Pacific -- Activated Carbon Market Environment..... | 233 |
| 26 Other Asia/Pacific -- Activated Carbon Supply & Demand..... | 235 |
| 27 Other Asia/Pacific -- Activated Carbon Demand by Application & Market..... | 237 |

OTHER REGIONS

| | |
|---|-----|
| 1 Central & South America -- Activated Carbon Market Environment..... | 240 |
| 2 Central & South America -- Activated Carbon Supply & Demand..... | 241 |
| 3 Central & South America -- Activated Carbon Demand by Application & Market..... | 244 |
| 4 Brazil -- Activated Carbon Market Environment..... | 246 |
| 5 Brazil -- Activated Carbon Supply & Demand..... | 247 |
| 6 Brazil -- Activated Carbon Demand by Application & Market..... | 249 |
| 7 Other Central & South America -- Activated Carbon Market Environment..... | 251 |
| 8 Other Central & South America -- Activated Carbon Supply & Demand..... | 252 |
| 9 Other Central & South America -- Activated Carbon Demand by Application & Market..... | 254 |
| 10 Eastern Europe -- Activated Carbon Market Environment..... | 256 |
| 11 Eastern Europe -- Activated Carbon Supply & Demand..... | 258 |
| 12 Eastern Europe -- Activated Carbon Demand by Application & Market..... | 260 |
| 13 Russia -- Activated Carbon Market Environment..... | 263 |
| 14 Russia -- Activated Carbon Supply & Demand..... | 264 |
| 15 Russia -- Activated Carbon Demand by Application & Market..... | 266 |
| 16 Other Eastern Europe -- Activated Carbon Market Environment..... | 268 |
| 17 Other Eastern Europe -- Activated Carbon Supply & Demand..... | 9 |
| 18 Other Eastern Europe -- Activated Carbon Demand by Application & Market..... | 271 |
| 19 Africa/Mideast -- Activated Carbon Market Environment..... | 274 |
| 20 Africa/Mideast -- Activated Carbon Supply & Demand..... | 275 |
| 21 Africa/Mideast -- Activated Carbon Demand by Application & Market..... | 278 |

INDUSTRY STRUCTURE

| | |
|---|-----|
| 1 World Activated Carbon Sales by Company, 2009..... | 281 |
| Cht World Activated Carbon Market Share by Company, 2009..... | 282 |
| 2 Selected Acquisitions & Divestitures..... | 286 |
| 3 Selected Cooperative Agreements..... | 288 |

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The US market will pace global growth based on new mandates for mercury removal at coal-fired power plants and mercury emissions control at cement kilns and industrial boilers.

Global demand to expand 9.9% yearly through 2014

World demand for virgin activated carbon is forecast to expand an impressive 9.9 percent per year through 2014 to 1.7 million metric tons. The US represents the largest national market for activated carbon in the world, and through 2014 the country will also pace global growth. Demand in the US will rise over 15 percent per year through 2014. This optimistic outlook is based on anticipated new federal environmental regulations mandating mercury removal at coal-fired power plants. These federal regulations, classified under maximum achievable control technology (MACT) standards, are likely to pass by 2011 and take effect by 2014. However, a number of states have already passed their own regulations, resulting in US activated carbon demand from coal-fired power plants rising significantly in 2009. Once the federal regulations take effect, sales of powdered activated carbon are expected to really take off in 2013 and 2014.

Demand in the US will also be aided by regulations that require mercury emissions control at cement kilns and at industrial boilers. Total new annual demand due to these two applications will be about 60,000 metric tons. US activated carbon demand from the water sector will benefit from the US Environmental Protection Agency's Stage 2 Disinfection Byproduct (DBP) Rule. This rule was promulgated in 2006 and



establishes maximum levels at which DBPs are permitted to be present in drinking water supplies. DBPs are potentially harmful compounds formed when chlorine used to disinfect drinking water reacts with naturally occurring organic materials in the water. By removing the organic materials, activated carbon prevents DBP formation.

Gains in China to be driven by economic growth

Unlike in the US, where federal regulations will dictate the bulk of new demand growth, strong gains of around ten percent per year in China's market for activated carbon will result from continuing healthy economic growth in the

country. All end uses for activated carbon in China will benefit from this economic growth. Although the country relies on coal to supply a majority of its energy requirements, US-type mercury removal regulations are unlikely to pass in China in the near future. Demand for activated carbon in Western Europe and Japan will register weak gains through 2014. However, in Western Europe there is a chance that coal will make a comeback as a key energy source. If new coal-fired power plants proliferate in Western Europe in the future, they are likely to also use activated carbon injection systems to curtail mercury emissions.

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Sample Text, Table & Chart

ASIA/PACIFIC

Australia: Supply & Demand

Demand for activated carbon in Australia is forecast to ... metric tons. Au ... in recent years ... tons in 2009 and ... are nevertheless s ... the Philippines, S ... Thailand and Indonesia. Some higher-priced material is also primarily from Japan and the US.

A number of small scale activated carbon producers were in Australia in the early years of the 21st century, but most have ceased operations. At present, there are only two significant in the country: locally based mineral sands producers Tiwest. Tiwest produced close to 10,000 metric tons of activated carbon in 2009, while Iluka produced over 3,000 metric tons in the same year. Western Power (Australia) successfully produced activated carbon and eucalyptus oil from mallee eucalyptus trees in an experiment in Narrogin in western Australia in 2006, but no further production seems to have occurred thereafter. A number of local coal producers were successful at making activated carbon from coal in western Australia over the past decade, but this never translated into any significant production on a regular basis.

Activated Carbon Technologies (Australia) buys unfinished activated carbon and screens and mills this into powdered and granular products. The company operates a plant in Perth that opened in 2004 and can produce up to 12,000 metric tons of primarily coal-based activated carbon per year, although actual production is currently less than 5,000 metric tons. Seventy percent of the company's activated carbon raw material is sourced locally (primarily from coal) with 20 percent coming from China and 10 percent from the US.

183

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TABLE VII-5

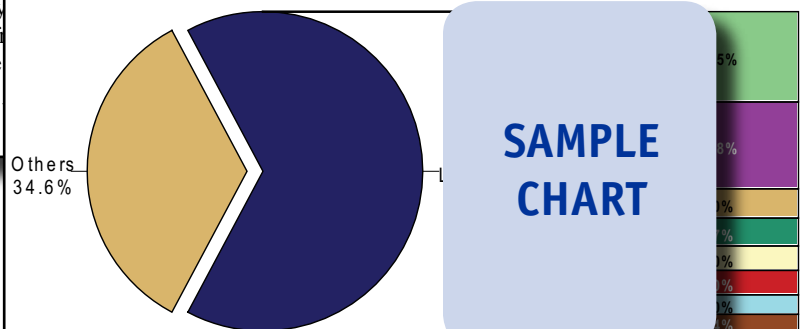
AUSTRALIA -- ACTIVATED CARBON SUPPLY & DEMAND (000 metric tons)

| Item | 1999 | 2004 | 2009 | 2014 | 2019 |
|---|------|------|------|------|------|
| Asia/Pacific Activated Carbon Demand % Australia | | | | | |
| Activated Carbon Demand | | | | | |
| Powdered | | | | | |
| Granular | | | | | |
| Other Products | | | | | |
| - imports | | | | | |
| + exports | | | | | |
| Activated Carbon Production | | | | | |
| Imports as a Percent of Demand | | | | | |
| Exports as a Percent of Production | | | | | |

SAMPLE
TABLE

CHART IX-1

WORLD ACTIVATED CARBON MARKET SHARE BY COMPANY (\$1.5 billion, 2009)

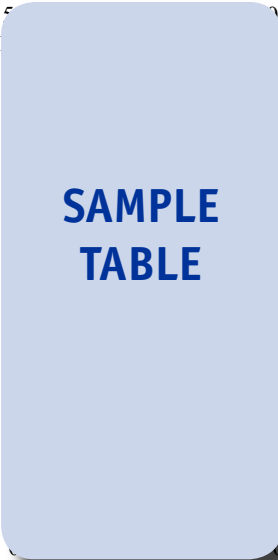


SAMPLE
CHART

Sample Profile, Table & Forecast

TABLE VII-6
AUSTRALIA -- ACTIVATED CARBON DEMAND BY APPLICATION & MARKET (000 metric tons)

| Item | 1999 | 2004 | 2009 | 2014 | 2019 |
|--|------|------|------|------|------|
| Gross Domestic Product (bil 2008 US\$) | 50.5 | 55.5 | 60.5 | 65.5 | 70.5 |
| metric tons AC/bil \$ GDP | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Activated Carbon Demand | | | | | 0.0 |
| By Application: | | | | | |
| Liquid Phase | | | | | 0.2 |
| Gas Phase | | | | | 0.8 |
| By Market: | | | | | |
| Industrial | | | | | 0.8 |
| Air Purification | | | | | 0.5 |
| Other Industrial Uses | | | | | 0.3 |
| Water Treatment | | | | | 0.1 |
| Drinking Water | | | | | 0.1 |
| Other Water Treatment | | | | | 0.0 |
| Food & Beverage | | | | | 0.6 |
| Sweetener Processing | | | | | 0.9 |
| Other Food & Beverage | | | | | 0.7 |
| Motor Vehicle | | | | | 0.4 |
| Pharmaceutical & Medical | | | | | 0.3 |
| Other Markets | | | | | 0.8 |



COMPANY PROFILES

Desotec Activated Carbon NV-SA

Regenbeekstraat, 44
 8800 Roeselare
 Belgium
 32-5124
 http://www

Annual S
 Employ

Key Pro
 carbon; a
 powder
 services

**SAMPLE
PROFILE**

Desotec Activated Carbon is a producer of activated carbon for purification applications. The Company is privately held.

The Company is involved in the world activated carbon industry through the production, delivery, return and reactivation of activated carbon, as well as through the design, sale and rental of activated carbon-based filters. Activated carbon from Desotec is produced in granular, pelletized and powdered forms and based on coal, coconut shells and wood.

Coal-based activated carbon from the Company includes granular, pelletized and powdered types sold under the ORGANOSORB, OXYSORB, AIRPEL and PARADIOX brand names. Specific products include ORGANOSORB 10 standard coal-based granular activated carbon for water treatment applications; ORGANOSORB 11 standard acid-washed, coal-based granular activated carbon for liquid purification applications; AIRPEL 10 pelletized activated carbon, which is designed for use in volatile organic compound treatment and other gas applications; ORGANOSORB 100 R powdered reactivated carbon for

“Demand for activated carbon in Australia is forecast to exceed 11,000 metric tons in 2014. In Australia, gold mining is a major outlet for activated carbon use (classified under other industrial uses in this study) since the country is essentially tied with the US as the world’s third largest producer of gold, behind China and South Africa.”
 --Section VII, pg. 184-5

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OTHER STUDIES

World Industrial Gases

Global demand for industrial gases will increase 8% yearly to 2014. The Asia/Pacific region will remain the fastest growing based on its ever expanding manufacturing base. The Africa/Mideast region will also exceed average growth rates, driven in part by its large oil reserves and refining industry. This study analyzes the \$35.7 billion world industrial gas industry, with forecasts for 2014 and 2019 by market, type, world region and for 27 countries. It also evaluates company market share and profiles industry participants.

#2659 August 2010 \$5900

World Specialty Silicas

World specialty silicas demand will rise 6.3% yearly through 2014, driven by growth in key silica markets such as tires, rubber, chemicals and agricultural products. Precipitated silica will remain the dominant product type and lead gains. The Asia/Pacific region will grow at the fastest pace. This study analyzes the 2 million metric ton world specialty silica industry, with forecasts for 2014 and 2019 by product, market, world region and for 14 countries. It also evaluates company market share and profiles industry participants.

#2644 June 2010 \$5800

World Salt

Global salt demand will rise 2.6% yearly through 2013. Growth in developing countries will more than offset an expected contraction of salt demand in developed economies. The large chemical manufacturing market will generate most new demand, due to rapid growth in Chinese chemical production. This study analyzes the \$9.7 billion world salt industry, with forecasts for 2013 and 2018 by salt market, production method, world region and for 20 countries. It also evaluates company market share and profiles industry participants.

#2597 March 2010 \$5700

World Carbon Black

World demand for carbon black is forecast to rise 4.3% annually through 2013. Growth in the non-tire rubber product market will outpace growth in the dominant motor vehicle tire sector, while the smaller special blacks market will rise the fastest. The Asia/Pacific region will post the strongest gains. This study analyzes the 9.4 million metric ton world carbon black industry, with forecasts for 2013 and 2018 by market, world region and for 25 countries. It also evaluates company market share and profiles industry players.

#2596 February 2010 \$5700

World Filters

Global demand for filters is forecast to expand 5.1% annually through 2013. Market advances in the developing areas will considerably outpace increases in the US, Western Europe and Japan. Sales of air purification filters will be the fastest growing segment while internal combustion engine and related filters remain the largest. This study analyzes the \$45.5 billion world filter industry, with forecasts for 2013 and 2018 by product, market, world region and for 26 countries. It also evaluates market share and profiles industry players.

#2568 November 2009 \$6100

About The Freedonia Group

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