New study finds:

• **World demand for fluorochemicals** is forecast to grow 3.4 percent per annum to 2 million metric tons in 2005, valued at US$11.4 billion.

• **Strongest growth** is expected for a variety of specialty products including gases and polymers used in the electronics industry, pharmaceutical and agrochemical intermediates, novel polymer formulations, various specialty chemicals and HFCs, all of which will record gains well above the industry average.

• **Leading producers of fluorochemicals** include DuPont, Atofina (Total Fina Elf), Daikin, Solvay, Ausimont (Montedison) and 3M, which together controlled over half of worldwide fluorochemical sales in the year 2000.
World Fluorochemicals, a new study from The Freedonia Group, provides you with an in-depth analysis of the major trends in the world market for fluorochemicals and the outlook for product segments and major markets -- critical information to help you with strategic planning.

This brochure gives you an indication of the scope, depth and value of Freedonia’s new study, World Fluorochemicals. Ordering information is included on the back page of the brochure.

Brochure Table of Contents

Study Highlights ................................................................. 2
Study Table of Contents and List of Tables and Charts .......... 4
Sample Pages and Tables from:
  Market Environment ..................................................... 6
  Product & Market Overview ........................................... 7
  Supply and Demand by Country & Region ..................... 8
  Industry Structure ...................................................... 9
  Company Profiles ..................................................... 10
  List of Companies Profiled ....................................... 11
Forecasting Methodology .................................................. 12
About the Company ..................................................... 13
Advantages of Freedonia Reports ................................... 13
About Our Customers ................................................... 14
Related Studies .......................................................... 15
Ordering Information .................................................... 16
• World demand for fluorochemicals is forecast to grow 3.4 percent per annum to 2 million metric tons in 2005, valued at US$11.4 billion.

• Environmental concerns have had a dramatic impact on the industry over the past decade and this trend is expected to continue due to the inclusion of a number of key fluorochemicals in high profile international environmental agreements such as the Montreal Protocol and the Kyoto Protocol.

• The fastest growth for fluorochemicals is expected in Asia, especially China, India, South Korea and developing nations in Southeast Asia.

• Strongest growth is expected for a variety of specialty products including gases and polymers used in the electronics industry, pharmaceutical and agrochemical intermediates, novel polymer formulations, various specialty chemicals and HFCs, all of which will record gains well above the industry average.

• Leading producers of fluorochemicals include DuPont, Atofina (Total Fina Elf), Daikin, Solvay, Ausimont (Montedison) and 3M, which together controlled over half of worldwide fluorochemical sales in the year 2000.
Study Highlights

World Fluorochemical Demand, 2000

Sample Table

© Copyright by The Freedonia Group, Inc.

World Fluorochemical Demand (000 metric tons)

<table>
<thead>
<tr>
<th>Item</th>
<th>1990</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
<th>% Annual Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Population (million)</td>
<td>5266</td>
<td>6058</td>
<td>6424</td>
<td>6795</td>
<td>00/90 1.4 05/00 1.2</td>
</tr>
<tr>
<td>kg fluorochem/capita</td>
<td>0.31</td>
<td>0.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Fluorochemical Demand</td>
<td>1610</td>
<td>1685</td>
<td>1995</td>
<td>2430</td>
<td>% Annual Growth</td>
</tr>
<tr>
<td>By Type:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluorocarbons</td>
<td>1081</td>
<td>905</td>
<td></td>
<td></td>
<td>-1.8 1.7</td>
</tr>
<tr>
<td>Inorganics &amp; Specialties</td>
<td>459</td>
<td>650</td>
<td></td>
<td></td>
<td>3.5 5.1</td>
</tr>
<tr>
<td>Fluoropolymers</td>
<td>70</td>
<td>130</td>
<td></td>
<td></td>
<td>6.4 6.1</td>
</tr>
<tr>
<td>By Region:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td>560</td>
<td>595</td>
<td></td>
<td></td>
<td>0.6 2.9</td>
</tr>
<tr>
<td>Western Europe</td>
<td>345</td>
<td>300</td>
<td></td>
<td></td>
<td>-1.4 1.9</td>
</tr>
<tr>
<td>Japan</td>
<td>195</td>
<td>170</td>
<td></td>
<td></td>
<td>-1.4 1.7</td>
</tr>
<tr>
<td>Other Asia/Pacific</td>
<td>165</td>
<td>345</td>
<td></td>
<td></td>
<td>7.7 5.9</td>
</tr>
<tr>
<td>Other World</td>
<td>345</td>
<td>275</td>
<td></td>
<td></td>
<td>-2.2 4.0</td>
</tr>
<tr>
<td>$/kg</td>
<td>2.27</td>
<td>4.78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Fluorochemical Demand (mil $)</td>
<td>3650</td>
<td>8050</td>
<td></td>
<td></td>
<td>% Annual Growth</td>
</tr>
</tbody>
</table>

© Copyright by The Freedonia Group, Inc.

World Fluorochemicals #1434

Order form on last page
Tables and Charts are featured for each region and country. Historical data and forecasts are presented for 1990, 1995, 2000, 2005 and 2010.

For each country/region, the following are given:

- Population
- \$GDP/capita
- Gross Domestic Product
- Gross Fixed Capital Investment
- Motor Vehicle Production
- Motor Vehicles in Use
- Fluorochemical Demand
  - Fluorocarbons:
    - HCFCs
    - HFCs
    - CFCs
  - Inorganics & Specialties (selected countries)
  - Fluoropolymers (selected countries)
- Refrigerants
- Blowing Agents
- Components
- Other
  + net exports
- Fluorochemical Production
  - kg fluorochemicals/capita
  - kg fluorochemicals/mil \$GDP
The Kyoto Protocol to the Framework Convention on Climate Change was drafted in 1997 and would require industrialized countries to reduce emissions of the six major greenhouse gases -- including key fluorochemicals such as HFCs, SF6 and PFCs -- by over five percent (based on a 1990 baseline) during the 2008 to 2012 time period. The agreement will become legally binding when 55 countries ratify it. However, while in general there has been widespread support and adherence to the terms of the Montreal Protocol, approval of the Kyoto Protocol has been problematic due in great part to the lack of support from the United States. The most prominent objection to implementation of the Kyoto Protocol is its failure to include any restrictions on greenhouse gas emissions in developing countries, which could give these countries an economic advantage over those countries which meet the new standards. However, in July 2001 at meetings in Bonn, Germany, an agreement was reached among most world nations (the US not among them). As a result, the treaty may be ratified as early as 2002. However, none of the world’s leading industrial nations has yet to ratify the treaty and without US support (the US accounts for 25 percent of emissions) the final outcome of these meetings remains to be seen.

If ratified, the Kyoto Protocol could have a negative impact on the fluorochemical industry due to the inclusion of HFCs, PFCs and sulfur hexafluoride under the controlled substances. HFCs are playing an important role as substitutes for CFCs and HCFCs in applications such as refrigeration and foam blowing and demand is growing strongly worldwide. While the Protocol does not actually call for the elimination of these substances (in contrast to the Montreal Protocol) it does require reduced emissions, which would likely have a dampening effect on market expansion. However, due to the importance of HFCs in meeting Montreal Protocol requirements, the Kyoto Protocol does have mechanisms which would

© Copyright by The Freedonia Group, Inc.
The Product and Market Overview Section highlights the key issues that have affected the global fluorochemicals market over the past ten years and summarizes contributing growth factors.

This information helps you:

- Focus your sales and marketing efforts on high growth areas.
- Propose new areas for development.

Components

Fluorochemicals, primarily polymers, are used in a variety of industrial components, including wire and cable jacketing, seals, pipes and tubing, linings for vessels and equipment, semiconductors, biomedical products and many others. The most important markets for these components are in the construction, motor vehicle, electronics, chemical and communications industries, although demand is growing briskly in a number of other sectors as well.

Demand for fluorochemicals in compounds is forecast to grow 7.9 percent per annum to 180,000 metric tons in 2005, led by robust gains in the electronics sector (with particularly high gains in the newly developed batteries market). Growth will be spurred by the continued development of new applications (such as batteries, fuel cells and vinyl siding cap stock) as well as the production of novel polymers and blends.

Wire and cable jacketing was one of the leading applications in the year 2000, although this market will experience the slowest growth due to increasing market maturity and competition from other materials and technologies. Fluoropolymers and other insulating thermoplastics are used as jacketing for wire and cable in applications such as buildings, electronics, data transmission and telephone lines. Demand for wire and cable coatings depends primarily on the level of wire and cable shipments but also on the effectiveness of alternatives and government standards. In these applications, fluoropolymers compete against synthetic rubber.

The electronics market presents some of the best opportunities for fluorochemical products, with double digit growth forecast through 2005. Demand will be brisk for both fluoropolymers and specialty gases in this sector, especially products used in

World Inorganic & Specialty Fluorochemicals Demand by Type & Region

(000 metric tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>World Population (million persons)</td>
<td>5266</td>
<td>5675</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kg chem/capita</td>
<td>0.09</td>
<td>0.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Inorganic &amp; Specialties</td>
<td>459</td>
<td>511</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By Type:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commodity Inorganics</td>
<td>440</td>
<td>490</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialties</td>
<td>19</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By Region:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td>155</td>
<td>170</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Europe</td>
<td>86</td>
<td>101</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td>75</td>
<td>116</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other World</td>
<td>143</td>
<td>177</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% inorganic &amp; specialty</td>
<td>28.5</td>
<td>34.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Fluorochemical Demand</td>
<td>1610</td>
<td>1475</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© Copyright by The Freedonia Group, Inc.

Order form on last page
These Sections analyze demand trends and consider the threats and opportunities in each country and region.

**WESTERN EUROPE**

**Spain - Suppliers**

Spain has become an increasingly important supplier of fluorochemicals to the world market in recent years with a strong presence in fluorocarbons and inorganic chemicals. Companies with significant manufacturing operations in Spain include Atofina, Derivados del Fluor and Solvay.

Atofina produces HCFCs and HFCs at a facility in Zaramillo. The company has announced plans to increase its HFC-134a production at the site by 50 percent and will also start up a new HFC-32 plant in 2002. The new plant will use an in-house patented production process and will likely make Atofina the largest producer of HFC-32 in the world.

Solvay, via Solvay Fluor Iberica, gained its manufacturing presence in Spain through the purchase of Hoechst's facility in Tarragona in 1996. The plant supplies both HCFC-22 and HFA-227, with approximately 95 percent of output geared primarily for refrigeration and medical aerosol applications.

Derivados del Fluor is a significant producer of inorganic fluorine chemicals at its plant in Onton. The company offers a variety of products including aluminum fluoride and synthetic cryolite as well as other inorganic fluorides, bifluorides, fluosilicates and fluoroborates.

**Canada - Fluorochemical Demand by Market**

(000 metric tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Domestic Product (bil $ GDP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kg fluorochem/mil $ GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluorochemical Demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigerants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blowing Agents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Components</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Canada</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North America Fluorochemical Demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© Copyright by The Freedonia Group, Inc.

**South Korea - Fluorochemicals Supply & Demand**

(000 metric tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (million persons)</td>
<td>42.9</td>
<td>45.0</td>
<td>47.2</td>
<td>48.9</td>
<td>50.4</td>
</tr>
<tr>
<td>kg fluorochem/capita</td>
<td>0.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluorochemical Demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigerants</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blowing Agents</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Components</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Fluorochemicals</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFCs</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ net exports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluorochemical Production</td>
<td>-15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© Copyright by The Freedonia Group, Inc.
Industry Structure

Gain a better global understanding of your competition and analyze your company’s position in the industry with information about:

- market share
- industry restructuring
- competitive strategies
  - product focus/specialization
  - product differentiation
  - research & development
  - cooperative agreements
- marketing & distribution

Research & Development

In order to achieve continued success in the world fluorochemicals industry, companies generally maintain an active research and development program. Fluorochemicals are a research-intensive industry due in large part to environmental regulations and the need to create new, environmentally friendly products to replace those being phased out. In addition, companies focus research and development operations on the creation of new applications for fluorocarbons, new products for growing industries, and new fluoropolymer products. The development of more effective manufacturing techniques is also a key concern in the fluoropolymer industry.

Since the discovery in the 1970s that fluorocarbons were destroying the upper-atmosphere ozone layer, research efforts have been targeted at developing non-ozone depleting alternatives. Fluorinated replacements for CFCs were soon developed, in the form of HCFCs, that were far less harmful to the ozone layer than their predecessors. Eventually, HFCs, with no ozone depletion potential at all, were designed to replace both CFCs and HCFCs. The development of effective HFC products continues, with companies creating ever more useful and powerful fluorocarbon replacements. For example, Solvay Fluor is pursuing the development of SOLKANE 365mfc, an energy-saving HFC blowing agent designed to replace HCFC-141b in polyurethane foam blowing applications. The company is producing pilot quantities of SOLKANE 365mfc at a plant in Tavaux, France and expects to begin full commercialization of the product in 2002 or 2003. For its part, Honeywell introduced GENETRON HFC-225fa, another non-ozone depleting foam blowing agent designed to replace HCFC-141b, in late 1999.

The development of novel applications for fluorocarbon products is another strategy pursued by a number of companies in an attempt to spur demand for these...
Company Profiles

The Profiles Section covers more than 75 companies active in the world fluorochemicals industry, including in-depth profiles on 14 leading companies. These profiles represent a sampling or cross-section of the types of companies involved in the industry.

Divisions, subsidiaries, joint ventures, etc., are discussed under appropriate parent companies.

Sources for profiles included:

- Information provided by key staff members in the respective companies
- Annual reports
- 10-K reports
- Security analysts reports
- Corporate product literature

INEOS plc
First Floor Office, Queens Gate
15-17 Queens Terrace
Southampton SO14 3BP
United Kingdom
44-2380-248-150
http://www.ineos.com

INEOS Fluor
300 Dickenson Drive
Chadds Ford, PA 19317
484-840-1834
http://www.ineosfluor.com

INEOS plc is a privately-held chemicals company which operates through five primary businesses: INEOS EO and Specialties, INEOS Acrylics, INEOS Fluor, INEOS Chlor and INEOS Silicas. The Company, which was formed in 1998, has expanded through the completion of five acquisitions between March 1999 and February 2001 and is now the second largest chemical company in the United Kingdom. INEOS operates 35 manufacturing facilities worldwide. The Company has annual estimated sales of approximately $3 billion and employs approximately 6,000. (Sales and employment as reported by company, 2/01.)

The Company entered the world fluorochemical industry in January 2001 when it acquired US-based ICI Klea (US), along with two other businesses, from United Kingdom (UK)-based Imperial Chemical Industries plc. ICI Klea had been a global producer of industrial and specialty fluorochemicals, including refrigerants, medical propellants and chemical intermediates. Included in the acquisition were ICI Klea’s three manufacturing plants in St. Gabriel, Louisiana; Runcorn, Cheshire, the UK;...
Companies Profiled

Air Products and Chemicals Incorporated
Daido Air Products Electronics Incorporated
Korea Industrial Gases
Solkatronic Chemicals Incorporated
Alcoa Incorporated
Asahi Glass Company Limited
F2 Chemicals Limited
Daikin Industries Limited
Formosa Daikin Advanced Chemicals Company Limited
MDA Manufacturing Incorporated
DuPont (EI) de Nemours
Mitsui DuPont Fluorochemicals Company
Great Lakes Chemical Corporation
Honeywell International Incorporated
AlliedSignal Incorporated
Imperial Chemical Industries plc
INEOS plc
ICI Klea
Minnesota Mining and Manufacturing Company (3M)
Alventia LLC
Dyneon LLC
MDA Manufacturing Incorporated
Montedison SpA
Agora SpA
Ausimont SpA
CTSP Corporation
Rhodia SA
Solvay SA
Alventia LLC
Chemtech Products Incorporated
Norfluor SA
Total Fina Elf SA
Atofina SA
Elf Atochem
Freedonia does not just collect and reprint data; Freedonia develops data. Our analysts thoroughly investigate an industry by extensively interviewing key industry participants and analyzing information from sources such as associations, government and trade literature. Once this research is complete, Freedonia establishes one set of forecasts. All writing, editing and forecasting is done in-house to assure quality and consistency. In cases where data does not exist, Freedonia develops the data based on input/output ratios, bills of materials and flow charts. The following chart summarizes Freedonia’s methodology.
The Freedonia Group, Inc. is a leading international industry study/database company.

Since 1985, Freedonia has published over 1,600 titles covering areas such as plastics, chemicals, coatings and adhesives, building materials, industrial components and equipment, health care, packaging, household goods, security, and many other industries.

Freedonia has produced a wide variety of titles, including:

- Solvents: Green & Conventional
- World Commercial Refrigeration Equipment
- Industrial Gases
- Insulated Wire & Cable
- Industrial Water Management Chemicals

Because Freedonia is a reliable information source, our forecasts are cited in numerous publications such as The Wall Street Journal, Chemical Week and Chemical Market Reporter.

Advantages of Freedonia Reports

In-house operations
Because all of our staff work at the same location, interaction between analysts and departments provides a strong system of checks and balances.

Consistency
Our Economics Group develops indicators that are used by all analysts. Therefore, every Freedonia study is based on a consistent set of economic assumptions (GDP, global population, commercial refrigeration outlook, etc.).

Reliable forecasts
Because all of our forecasts consider the environment in which a product or industry is operating, as well as threats and opportunities to the market, Freedonia forecasts are reliable indicators of future performance.

One-on-one interviews
All studies are produced by conducting interviews with key industry participants and end-users.

Proprietary electronic database
Freedonia's analysts can tap into an extensive in-house electronic database containing corporate literature (including private company information), trade publications, government reports and many other sources of information.
Freedonia’s clients include major US and international companies in the manufacturing, services, consulting and financial sectors.

Typical purchasers of Freedonia studies:

- Key Executives
- Corporate Planners
- Market Researchers
- Financial Analysts
- Information Centers
- New Product Developers
- Merger & Acquisition Specialists

Since 1985 we have provided research to customers ranging in size from global conglomerates to one person consulting firms. More than 90% of the industrial companies in the Fortune 500 use Freedonia research to help with their strategic planning.

Some of Freedonia’s customers in the fluorochemicals industry include: DuPont (EI) de Nemours, Honeywell International, Solvay SA and Total Fina Elf SA.
Related Studies
From Freedonia

For more information about these or other Freedonia titles, please contact us at:

The Freedonia Group, Inc.
Phone: (440) 684-9600
(800) 927-5900
Fax: (440) 646-0484

Solvents: Green & Conventional
Following a lengthy period of decline, demand for solvents in the US will exhibit positive annual growth through 2005. While demand for conventional solvents will be flat, green solvents will post robust advances, capturing 20% of the market by 2005. Cleaning products and transportation will be the fastest growing markets. This study analyzes the $3.3 billion US solvents industry to 2005 and 2010 by product, function and market. It also presents market share data and profiles leading companies.
#1418. . . . . . . . 5/01. . . . . . . . . . $5,700

World Commercial Refrigeration Equipment
World demand for commercial refrigeration equipment will grow over 6% annually, driven by rising demand in developing countries. Japan will lead gains among developed countries. Reach-in and walk-in coolers and freezers, vending machines, display cases and ice machines will be the fastest growing products. This study analyzes the US$18.6 billion commercial refrigeration equipment industry to 2004 and 2009 in six world regions and 22 countries. It also evaluates market share and profiles key firms.
#1367. . . . . . . . 1/01. . . . . . . . . . $4,500

Industrial Gases
US shipments of industrial gases will grow over 6% annually. Gains will be driven by moderate expansion in the metal and chemical processing industries and rapid gains in electronics, petroleum refining, enhanced oil recovery and water treatment markets. Nitrogen and oxygen will continue to dominate shipments, while hydrogen grows the fastest. This study analyzes the $4.5 billion US industrial gas industry to 2004 and 2009 by type and application. It also profiles key companies and evaluates market share.
#1345. . . . . . . . 10/00. . . . . . . . . . $3,600

World Electronic Components
World electronic component demand will grow over 9% annually based on further development of the Internet, new generations of handheld and wireless computers, and rising electronic content in original equipment. High-end integrated circuit (IC) devices such as microprocessors and digital logic ICs will lead gains. This study analyzes the $278 billion world electronic components industry to 2004 and 2009 by product, market and region, and for 33 countries. It also details market shares and profiles key vendors.
#1322. . . . . . . . 10/00. . . . . . . . . . $4,500

World Fluorochemicals #1434

World Insulated Wire & Cable
Worldwide demand for insulated wire and cable will grow over 5% annually. The best opportunities will come in the largest market, communications and information processing. Growth in wireless communications will benefit wire and cable in applications such as antenna towers and base station transmission units. This study analyzes the $67 billion world insulated wire and cable industry to 2004 and 2009 by type, market, material, region and for 23 countries. It also details market shares and profiles key firms.
#1304. . . . . . . . 8/00. . . . . . . . . . $4,300

Fluorochemicals
US demand for fluorochemicals will approach $5 billion in 2004, spurred by a shift in product mix toward more expensive chemicals and strong demand in specialty sectors. Good growth is expected in fluoropolymers, especially newer melt-processable varieties; specialty fluorine gases, such as nitrogen trifluoride; and specialty organic chemicals. This study analyzes the US market for fluorochemicals to 2004 and 2009 by type, function and market. It also presents market share data and profiles key firms.
#1268. . . . . . . . 7/00. . . . . . . . . . $3,600

Industrial Water Management Chemicals
US demand for industrial water management chemicals will grow nearly 5% annually. Stricter pollution controls have prompted more industrial water recycling, and thus a greater need for chemical treatment. Corrosion inhibitors will remain the value leader, with oxidizers and biocides growing the fastest. This study analyzes the $1.8 billion US industrial water management chemicals industry to 2004 and 2009 by type, application and market. It also evaluates market share and profiles key industry participants.
#1223. . . . . . . . 3/00. . . . . . . . . . $3,500

Specialty Gases
Demand for specialty gases in the US will grow over 6% annually, driven by continuing strong gains in semiconductor markets where gases are used as etchants, cleaning agents and dopants. Laser uses will also boost demand based on the rising popularity of elective surgeries (e.g., vision correction, wrinkle removal) using excimer lasers. This study analyzes the $1.3 billion US market for specialty gases to 2003 and 2008 by type and application. It also presents market share data and profiles key companies.
#1184. . . . . . . . 11/99. . . . . . . . . . $3,400

Order form on last page
How to Order

Ordering Information
Fill out the coupon below and mail it to The Freedonia Group, or send your order by fax (440) 646-0484. E-mail to info@freedoniagroup.com

Handling and Shipping is FREE
There is no charge for handling and shipping. In the US we ship via UPS. Outside the US, we provide free airmail service. If you would like express delivery, we provide this to you at cost.

Save Fifteen Percent
If you order three (3) different titles at the same time, you can receive a discount of 15 percent. If your order is accompanied by a check, you may take a 5 percent cash discount (discounts do not apply to corporate use licenses).

Use Credit Card
You may charge your order to either Visa, MasterCard or American Express. Please include your credit card account number, expiration date and your signature.

Orders Outside of the US
Checks must be paid in US funds and drawn against a US bank. Wire transfers should be sent to: Fifth Third Bank, Cincinnati, Ohio; The Freedonia Group, Inc.; SWIFT #FTBCUS3C; ABA #042000314; Account # 830-51814 (please include study number and/or invoice number with all wire transfers).

Additional Copies
Additional copies are available to original purchasers at $400 per title.

Online Access
The complete text and tables from our studies and reports can be found on our Web site: www.freedoniagroup.com and through major commercial online vendors.

THE FREEDONIA GROUP, INC.
767 Beta Drive
Cleveland, OH 44143-2326 USA
Phone: (440) 684-9600 • (800) 927-5900
Fax: (440) 646-0484

Name: ____________________________
Title: _____________________________
Company: _________________________
Division: __________________________
Street: ____________________________
(no PO Box please)
City/State/Zip: ________________________
Country: ____________________________
Phone: ____________________________ Fax: ____________________________
Email: ____________________________

Please check method of payment: Total: $ ____________________________
☐ Enclosed is my check (5% discount) drawn on a US bank and payable to The Freedonia Group, Inc., in US funds. (Ohio residents add 7% sales tax).
☐ Bill my company ☐ MasterCard ☐ American Express
☐ Visa

Shipping and Handling charges are FREE via UPS (USA only) or airmail (Outside USA). Express delivery available at cost. Please inquire.

F-SM.1434

Corporate Use Licenses
Now every decision maker in your organization can act on the key intelligence found in all Freedonia studies. For an additional $2,000, you receive unlimited use of an electronic version (PDF) of the study. Place it on your Intranet, e-mail it to coworkers around the world, or print it as many times as you like! Order it today.

#1434 World Fluorochemicals $4,500
☐ Corporate Use License (add to study price) +$2,000
Additional Print Copies @ $400 Each

Please include your credit card account number, expiration date and your signature.

Signature: ____________________________