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World Flame Retardants

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

Study #2709 | December 2010 | \$5900 | 314 pages

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Demand will benefit from an improved economic outlook, trends toward more stringent safety and flammability standards and the rising use of plastic products over less flammable materials.

Global demand to rise 6.1% yearly through 2014

World demand for flame retardant additives is forecast to rise 6.1 percent per year to 2.2 million metric tons in 2014. Gains will represent a substantial acceleration from the pace of the 2004-2009 period, in which demand was severely impacted by the effects of a global economic slowdown, especially in the mature markets of the US, Western Europe and Japan. In addition to an improved economic outlook, flame retardant demand will also benefit from trends toward more stringent safety and flammability standards and the rising use of plastic products instead of less flammable materials.

'Greener' formulations to see more rapid advances

Alumina trihydrate was the leading flame retardant product by volume in 2009, and is also expected to see above-average gains in demand through 2014, driven by trends toward non-halogenated chemicals. Even more rapid advances, however, are forecast for phosphorus compounds and other flame retardants such as magnesium hydroxide, which feature favorable environmental and health profiles. Although brominated flame retardants are being phased out of a number of applications, demand for these products will remain healthy going forward, supported by their superior performance and the development of new, more environmentally friendly formulations.

World Flame Retardant Demand (2.2 million metric tons, 2014)



Asia/Pacific
49%

North America
23%

Western Europe
19%

Other Regions 9%

photo: Evcco

Motor vehicles, electrical/electronics to be fastest growing markets

Construction products were the leading market for flame retardants in 2009, accounting for one-quarter to total demand. However, faster gains are expected for electrical and electronic uses, fueled by rising production of electronic products and increasing flammability standards in Western Europe and the developing world. Motor vehicle markets for flame retardants will exhibit the most rapid advances in demand, as the use of plastic components rises and vehicle production in the US, Western Europe and Japan rebounds.

Asia/Pacific market to stay largest, fastest-growing

The Asia/Pacific region will continue to be largest and fastest-growing market for flame retardants, accounting for half of world demand by 2014. Advances will be fueled by nearly ten percent annual growth in the large Chinese market, strong increases in major electronics-producing countries such as Taiwan and South Korea, and a solid turnaround in Japanese demand. Gains in North America and Western Europe will rise at a more subdued pace, although each -- like Japan -- will exhibit a strong rebound from the declining demand of the 2004-2009 period.

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**Sample Text,
 Table & Chart**

ASIA/PACIFIC

China: Products

In 2009, China consumed 354,500 metric tons of flame surpassing the United States to become the world's largest m flame retardant additives. Consumption per dollar of GDP is the highest in the world, well above levels in the North Amer West European countries. Despite the already substantial siz flame retardant market in China, there is considerable room f as the country still has a relatively low level of demand per c per dollar of manufacturing value added. Demand for flame in China is forecast to grow 7,000 metric tons in 2014, valued at \$ by tremendous growth in virtually all fla es, as well as an increased focus on fir

Chlorinated flame r araffins, are the highest volume flame reta country's reliance on chlorinated flame retardants is expected to change going forward but consumption for these products will remain high, at least in the short term. Demand for chlorinated flame retardants is forecast to grow 5.5 percent per year through 2014, with China being one of the only countries where these materials are seeing significant gains. However, growth will be considerably slower than the average advances for flame retardants in China as a whole, because chlorinated compounds are being replaced with other products due to health and environmental concerns. As a result of this substitution, chlorinated flame retardants will decrease to 23 percent of total demand in 2014 in volume terms, down percent in 1999.

Brominated flame retardants, on the other hand, will co strong gains in demand, rising at an above-average pace thro Gains will be fueled by strong advances in the output of elec electronic products, for both domestic and export markets.

**SAMPLE
 TEXT**

TABLE VI-4

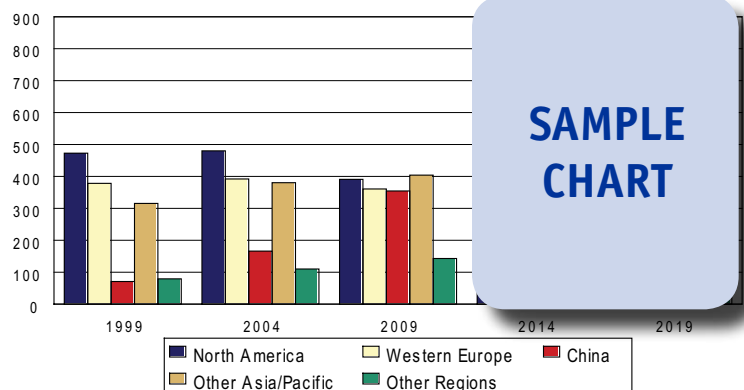
**CHINA -- FLAME RETARDANT DEMAND BY PRODUCT
 (thousand metric tons)**

Item	1999	2004	2009	2014	2019
Flame Retardant Demand					
Alumina Trihydrate					
Brominated Compounds					
Phosphorus Compounds					
Chlorinated Compounds					
Antimony Compounds					
Boron Compounds					
Other					
\$/kg					
Flame Retardant Demand (mil \$)					

**SAMPLE
 TABLE**

CHART III-1

**WORLD FLAME RETARDANT DEMAND BY REGION, 1999-2019
 (thousand metric tons)**

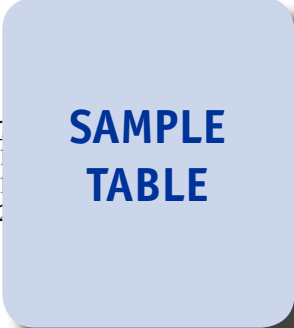


**SAMPLE
 CHART**

**Sample Profile,
 Table & Forecast**

TABLE VI-5
CHINA -- FLAME RETARDANT DEMAND BY MARKET
 (thousand metric tons)

Item	1999	2004	2009	2014	2019
Manufacturing Value Added (bil 2008\$) kg flame retardant/mil \$ MVA					
Flame Retardant Demand					
Construction					
Electrical & Electronics					
Wire & Cable					
Motor Vehicles					
Textiles					
Other					



COMPANY PROFILES

Italmatch Chemicals SpA
 Via Pietro Chiesa 7/13
 Torri Piane, San Benigno
 16149 Genova
 Italy
 39-010-642-08
 http://www.italmatch.com

Annual Sales:
 Employment:
 Key Products: phosphorus-based flame-retardant additives

SAMPLE PROFILE

Italmatch Chemicals is a leading European manufacturer of phosphorus derivatives intended for use in flame retardants, lubricant oil additives and other phosphorus-based products. The privately held company is owned by Investindustrial Holdings Limited (United Kingdom), a mid-market investment group.

The Company is active in the world flame retardants industry through the production of halogen-free phosphorus- and melamine-based flame-retardant additives. Italmatch Chemicals markets these chemicals under the MASTERET, MELAGARD and PHOSLITE brand names.

Italmatch Chemicals' MASTERET line includes red phosphorus-based additives, which provide flame retardancy in polyamide resins used in electrical and electronic components, insulating and construction materials, automotive components, furniture, and other products requiring enhanced mechanical and electrical properties. Among the chemicals in the MELAGARD line are melamine derivatives, such as

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“Demand for flame retardants in China is forecast to grow 9.8 percent per annum to 567,000 metric tons in 2014. While all major markets for flame retardants in China are expected to see very strong gains, demand in electrical and electronics applications -- the largest market in China in 2009 -- will increase the fastest. One reason for this will be the rapid growth of printed circuit board manufacturing in China, a key application for flame retardants in electronics.”
 --Section VI, pg. 165

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OTHER STUDIES

Activated Carbon

US activated carbon demand will grow 15.8 percent annually through 2014, driven mainly by stringent new air and water pollution laws. Powdered activated carbon (PAC) will be the main beneficiary of tighter industrial mercury controls, while granulated activated carbon (GAC) will benefit from new drinking water regulations. This study analyzes the 565 million pound US activated carbon industry, with forecasts for 2014 and 2019 by product, application and US regional market. It also evaluates company market share and profiles industry players.

#2713 *January 2011* \$5100

Automotive Coatings, Adhesives & Sealants

US automotive coating, adhesive and sealant demand will rise 9.4% yearly through 2014 as motor vehicle output recovers from the recent downturn. Coatings will remain the dominant segment, with water-based, powder and radiation-curable types leading gains. This study analyzes the \$3.6 billion US automotive coating, adhesive and sealant industry with forecasts for 2014 and 2019 by formulation and substrate, polymer, market and application. It also evaluates company market share and profiles industry competitors.

#2714 *November 2010* \$4800

Enzymes

US demand for enzymes will rise 4.8% annually to 2014. Gains will be driven by continued expansion of higher-value specialty enzymes in pharmaceuticals, diagnostics, research and biotechnology, and biocatalysts. In the biofuels segment, growth will moderate as the industry transitions to cellulases for producing biomass ethanol. This study analyzes the \$2.2 billion US enzymes industry, with forecasts for 2014 and 2019 by market and product. It also evaluates company market share and profiles industry competitors.

#2670 *September 2010* \$4900

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

Construction Chemicals

US on-site construction chemical demand will rise 3.4% yearly through 2013. Gains will be driven by a rebound in the housing market, a shift to higher value products and solid home improvement and repair spending. Caulks and adhesives will surpass protective coatings and sealers as the largest product segment by 2013. This study analyzes the \$7.7 billion US construction chemical industry, with forecasts for 2013 and 2018 by product and application. It also evaluates company market share and profiles industry players.

#2569 *January 2010* \$4700

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