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# World Flame Retardants

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Industry Study with Forecasts for 2018 & 2023

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Study #3258 | February 2015 | \$6300 | 330 pages

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*Gains will be driven by a heightened awareness of fire safety, more strictly enforced building codes, and the sale of more flame retarded plastic products such as automotive parts, foam insulation, and flooring.*

## World demand to rise 4.6% annually through 2018

Global demand for flame retardants is projected to expand 4.6 percent per year through 2018 to 2.8 million metric tons, valued at \$7.0 billion. Gains will be stimulated by an acceleration in electronic product, motor vehicle, and wire and cable production, particularly in the US, Western Europe, and Japan as they recover from the recession-impacted 2008-2013 period. In industrializing countries, the stricter enforcement of building codes will increase the market penetration for flame retardants in building materials, fueling sales increases. Rising personal incomes will also contribute to sales of flame retarded plastic products, such as those used in automobiles, as well as foamed plastic insulation and vinyl flooring for use in homes.

## China will be fastest growing major national market

China will post the fastest growth in demand of any major national market and retain its position as the largest, accounting for nearly one-third of 2018 global flame retardant consumption. India and Thailand will also post strong demand gains. Rising urbanization, along with climbing personal incomes in these nations, will stimulate a heightened awareness of fire safety and more strictly enforced building codes. Central and South America and the Africa/Mideast region will also record above

## World Flame Retardant Demand (2.8 million metric tons, 2018)



China

Other Asia/Pacific

North America

Western Europe

Other Regions

average sales increases for flame retardants. Demand in North America will rise at a faster pace than other developed areas due to a rebound in the US construction market, but will remain below the global average. Flame retardant markets in Western Europe and Japan, while returning to growth after 2008-2013 declines, will nevertheless trail the world pace of advance by considerable margins.

## Phosphorus-based flame retardants to grow fastest

Alumina trihydrate (ATH) was the most widely used flame retardant in 2013, accounting for nearly one-third of global demand, and it is expected to retain its

dominance in the product mix. Phosphorus-based flame retardants, meanwhile, will record the fastest market gains of any major product type. Other flame retardants, such as magnesium hydroxide (MDH) and melamine, will also record above average gains. Halogenated retardants, represented principally by bromine- and chlorine-based products, are being phased out across the globe due to their perceived environmental and human health risks, creating a market opportunity for suppliers of alternative flame retardant products. While declines will be sharpest in the industrialized world, export-oriented production in developing countries will also curtail halogenated retardant use.

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## Sample Profile & Table, & Study Coverage

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

Item	2003	2008	2013	2018	2023
Manufacturing Value Added (bil 2012\$) kg flame retardant/mil \$ MVA					
Flame Retardant Demand					
Construction					
Wire & Cable					
Electrical/Electronic					
Motor Vehicles					
Textiles					
Other					

Source: The Freedonia Group, Inc.

SAMPLE  
PROFILE

STUDY  
COVERAGE

*World Flame Retardants* is a Freedonia study that presents historical data (2003, 2008, 2013) plus forecasts (2018, 2023) for supply and demand, as well as demand by product and market in 6 regions and 18 countries. The study also considers market environment factors, analyzes the industry structure, evaluates company market share and profiles 35 global industry players.

**COMPANY PROFILES**

**Nabaltec AG**  
 Alustraße 50-52  
 92421 Schwandorf  
 Germany  
 49-9431-53-0  
 http://www.nabaltec.com

Revenues: \$1.2 billion in 2013  
 Geographic Focus: Europe 31%, Other 11%  
 European Countries: Germany, France, Italy, Spain, UK  
 Employment: 1,200

Key Products: aluminum hydroxide, and magnesium hydroxide flame retardants

Nabaltec is a manufacturer of flame retardant fillers for the plastics industry, and base materials for use in technical ceramics, catalysis, and the refractory industry. The Company functions in two segments: Functional Fillers and Technical Ceramics.

The Company competes in the world flame retardant industry through the Functional Fillers segment, which had 2013 revenues of \$120 million. The segment manufactures aluminum hydroxide-based and other products for a broad range of applications. These products include APYRAL, APYMAG, and ACTILOX flame retardants, which can be used to make cable, insulation, and other products utilized in tunnels, airports, high-rise buildings, electronic equipment, and plastics applications.

APYRAL flame retardants from Nabaltec include aluminum hydroxide and aluminum oxide hydroxide formulations. The Company's APYRAL aluminum hydroxide flame retardants have a chemical purity

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## Related Studies

### Hard Surface Flooring

Demand for hard surface flooring in the US is forecast to advance 6.1 percent per year to 11.3 billion square feet in 2019, valued at \$16.7 billion. The key residential market will post the fastest growth, driven by gains in housing completions and a shift toward hard surface flooring in living and dining areas, where carpet has predominated. This study analyzes the 8.4 billion square foot US hard surface flooring industry, with forecasts for 2019 and 2024 by product and market. The study also evaluates company market share and profiles industry competitors.

#3284.....April 2015.....\$5300

### Construction Chemicals

US demand for chemicals used in on-site construction will rise 8.2 percent annually through 2018 to \$12.1 billion. Sprayed polyurethane foam, cement and asphalt additives, and grouts and mortars will grow the fastest. Higher value formulations will continue to gain market share in response to environmental and performance concerns. This study analyzes the \$8.1 billion US construction chemical industry, with forecasts for 2018 and 2023 by product and application. The study also evaluates company market share and profiles industry players.

#3239.....January 2015.....\$5200

### World Flooring & Carpets

Through 2018, global demand for floor coverings is forecast to advance 4.5 percent annually to 19.4 billion square meters, valued at \$325 billion. Nonresilient flooring will remain the dominant product segment and will grow the fastest. China and the United States will be the two fastest growing major markets. This study analyzes the 15.5 billion square meter world flooring and carpet industry, with forecasts for 2018 and 2023 by product, market, world region, and for 20 countries. The study also evaluates company market share and profiles industry players.

#3227.....December 2014.....\$6500

### World Insulation

Through 2018, global demand for insulation will rise 5.0 percent annually to 24.9 billion square meters of R-1 value. The Asia/Pacific region will grow the fastest, driven by building construction activity and manufacturing and industrial output. Foamed plastic insulation will lead value gains. This study analyzes the current world industry, at 19.5 billion square meters of R-1 value, with forecasts for 2018 and 2023 by material, market, world region, and for 21 countries. The study also evaluates company market share and profiles industry players.

#3206.....October 2014.....\$6500

### World Fluorochemicals

Global demand growth for fluorochemicals is forecast to accelerate, rising 3.8 percent per year to 3.8 million metric tons in 2018. China will continue to be the largest and one of the fastest growing markets, with only India experiencing more rapid growth. Fluoropolymers will be the fastest growing product segment. This study analyzes the 3.2 million metric ton world fluorochemical industry, with forecasts for 2018 and 2023 by product, market, world region, and for 15 countries. The study also evaluates company market shares and profiles industry players.

#3200.....October 2014.....\$6300

## About The Freedonia Group

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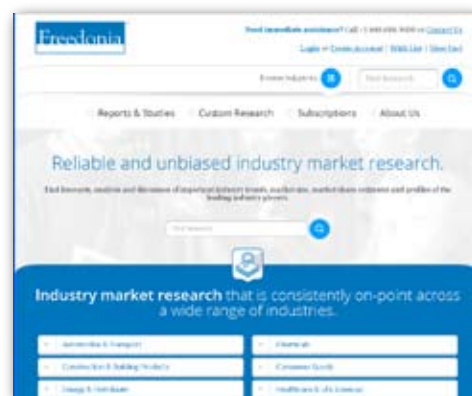
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