

## Survey of Flame Retardants Industry in China

# Survey of Flame Retardants Industry in China

*CCM Chemicals*

Date: Dec, 2009

Pages: 120

Price: US\$ 8,000.00

ID: S986083EC23EN

Flame retardants are important for lives safety as it can delay combustion process of inflammable materials for precious escape time. Now many familiar products contains flame retardants such as electrical & electronics, wire & cable, motor vehicles etc. With living standards improving, it is envisioned that China's flame retardants demand will increase greatly.

China currently has become a key player of flame retardants both in production and consumption. It can produce most common flame retardants with output of almost 500,000 tonnes in 2009, and has witnessed domestic consumption above 250,000 tonnes in 2009.

However, unlike developed countries, the domestic production concentrates on common products and lacks upscale products, mainly attributed to the still immature technologies. The domestic consumption is also focused on such traditional products as BFRs and ATO.

Meanwhile, many flame retardants and their downstream products are exported annually, suggesting high dependence on exports of Chinese market. Coupled with domestic expanding capacity and output, various commercial opportunities will be created for this industry in China.

In order to figure out the opportunities:

- CCM focuses on domestic production for different flame retardant types to discover their present situation and future prospects.
- CCM pays great attention to the major products and their producers in China.
- CCM analyzes domestic consumption by application field.
- CCM provides insights into key factors influencing flame retardant development and forecasts future demand and output for each flame retardant type to 2014.

Through the above penetrations in this report, the latest dynamics and development trends of Chinese flame retardant industry will be clearly presented, which is valuable for investors, traders (both exporters and importers), technology providers, overseas competitors, etc.

## Table of Content

### EXECUTIVE SUMMARY

### METHODOLOGY AND SOURCE

### I DEVELOPMENT HISTORY OF FLAME RETARDANTS IN CHINA

### II CHINESE FLAME RETARDANTS NOWADAYS

II-1 Overview of flame retardants in China

II-2 Introduction to major flame retardants

II-2-1 Brominated Compounds

II-2-2 Chlorinated Compounds

- II-2-3 Phosphorus Compounds
- II-2-4 Antimony Compounds
- II-2-5 Alumina Trihydrate and Magnesium Hydroxide
- II-2-6 Other Compounds

### **III END-USE MARKET OF FLAME RETARDANTS**

- III-1 Overview
  - III-1-1 Market growth (by volume & value)
  - III-1-2 Market analysis by application area
- III-2 Introduction to major end-use market segments
  - III-2-1 Electrical & Electronics
  - III-2-2 Motor Vehicle
  - III-2-3 Textile
  - III-2-4 Construction (wood, plastic)
  - III-2-5 Wire & Cable
  - III-2-6 Others

### **IV TECHNOLOGY INNOVATION IN FLAME RETARDANTS IN CHINA**

### **V FORECAST THE FUTURE OF FLAME RETARDANTS INDUSTRY IN CHINA (2009~2014)**

- V-1 Business environment
- V-2 Key factors influencing the development of flame retardants industry
- V-3 Qualitative and quantitative analysis of the prospect of flame retardants industry

### **VI CONCLUSIONS AND RECOMMENDATIONS**

### **VII APPENDIX**

- VIII -1 Profiles of key producers
  - VII-1.1 Heilongjiang Harbin Harmillion Chemical Co., Ltd.
  - ...
  - VII-1.15 Zhongzhou Branch China Aluminum Co., Ltd.
- VIII -2 Profiles of key end-users
  - VII-2.1 Guangdong Kingfa Sci &Tech. Co., Ltd.
  - ...
  - VII-2.5 Beijing ARS Flame Retardant Decoration Materials Co., Ltd.

### **LIST OF TABLES**

- Table 1 Annual average exchange rate of USD against RMB, 2004 ~ Jun. 2009
- Table II-2-1-1 Major TBBPA producers in China, 2009
- Table II-2-1-2 Tax change for products under HS code of 2908199090 since 2007
- Table II-2-1-3 Capacity and output of major derivatives of TBBPA in China
- Table II-2-1-4 Major producers of TBBPA-BDBPE in China, 2009
- Table II-2-1-5 Major BEPO producers in China, 2009
- Table II-2-1-6 Major BPS producers in China, 2009
- Table II-2-1-7 Major BPCO producers in China, 2009
- Table II-2-1-8 Ex-factory price of major TBBPA derivatives in China, Nov. 2009
- Table II-2-1-9 Major applications of major TBBPA derivatives in China
- Table II-2-1-10 Major DBDPE and DBDPO producers in China, 2009
- Table II-2-1-11 Application of DBDPE and DBDPO
- Table II-2-1-12 Major HBCD producers in China, 2009
- Table II-2-1-13 Major producers of TBP and TTBPC in China, 2009

Table II-2-1-14 SWOT analysis of BFRs in China  
Table II-2-2-1 Capacity and output of CFRs in China, 2009  
Table II-2-2-2 Major producers of CFRs in China, 2009  
Table II-2-2-3 Ex-factory price of major CFRs in China, Nov. 2009  
Table II-2-2-4 Major application of major CFRs in China.  
Table II-2-3-1 Comparison of halogenated phosphate flame retardant and non-halogenated PFRs  
Table II-2-3-2 Major TCPP producers in China, 2009  
Table II-2-3-3 Major TCEP producers in China, 2009  
Table II-2-3-4 Major TDCPP producers in China, 2009  
Table II-2-3-5 Unit consumption of major raw materials in BDP production  
Table II-2-3-6 Major BDP producers in China, 2009  
Table II-2-3-7 Major TEP producers in China, 2009  
Table II-2-3-8 Major APP producers in China, 2009  
Table II-2-3-9 SWOT analysis of PFRs in China  
Table II-2-4-1 Top ATO producers in China, 2009  
Table II-2-5-1 Major ATH&MH producers in China, 2009  
Table II-2-6-1 Major MCA producers in China, 2009  
Table II-2-6-2 Major producers of DOPO and ODOPB in China, 2009  
Table II-2-6-3 Major ZB producers in China, 2009  
Table IV-1 Comparison of production technologies for major flame retardants  
Table IV-2 Major Research institutes and their research result  
Table V-2-1 Critical success factors analysis for Chinese flame retardant industry, 2009  
Table VII-1.4-1 Output of major flame retardant in Shandong Weidong, 2009  
Table VII-1.4-2 Ex-factory price of major flame retardant in Shandong Weidong, Nov. 2009

## LIST OF FIGURES

Figure I-1 Development stage of China's flame retardant industry  
Figure II-1-1 Comparison of capacity and output for China's flame retardant, 2006 and 2009  
Figure II-1-2 Capacity structure of flame retardants in China, 2006 and 2009  
Figure II-1-3 Output structure of flame retardants in China, 2006 and 2009  
Figure II-2-1-1 Output structure of BFRs in China, 2006 and 2009  
Figure II-2-1-2 Scattergram of active TBBPA producers' output and growth rate, 2009  
Figure II-2-1-3 Outlet situation of Chinese TBBPA, 2009  
Figure II-2-1-4 Scattergram of active DBDPE and DBDPO producers in China, 2009  
Figure II-2-3-1 Capacity and output of PFRs in China, 2006 and 2009  
Figure II-2-3-2 Capacity structure of PFRs in China, 2009  
Figure II-2-3-3 Output structure of PFRs in China, 2009  
Figure II-2-3-4 Capacity of major PFRs producers in China, 2007 and 2009  
Figure III-1-1-1 Consumption of flame retardants in China in recent years  
Figure III-1-2-1 Consumption structure of flame retardants in downstream industries in China, 2009  
Figure III-1-2-2 Consumption structure of flame retardant in China by product type, 2009  
Figure III-2-1-1 PCB output value in China, 2002~2008  
Figure III-2-1-2 Mobile phone output in China, 2003~2009  
Figure III-2-1-3 Output of micro-computer and monitor in China, 2003~2009  
Figure III-2-1-4 Output of refrigerator and colour TV in China, 2003~2009  
Figure III-2-1-5 Consumption structure of flame retardant in electrical & electronics in China, 2009  
Figure III-2-2-1 Motor vehicle output in China and the world, 2003~2009  
Figure III-2-2-2 Consumption of engineering plastic in motor vehicle in China, 2008  
Figure III-2-2-3 Consumption structure of flame retardant in motor vehicle in China, 2009  
Figure III-2-3-1 Consumption structure of flame retardant in textile, 2009  
Figure III-4-1 Value added of construction and its growth rate, 2004~2008  
Figure III-4-2 Consumption structure of flame retardant in construction in China, 2009  
Figure III-2-5-1 Consumption structure of flame retardant in wire & cable in China, 2009  
Figure V-1-1 China's GDP growth, 2003-2009

Figure V-1-2 China's CPI growth rate, 2003-2008

Figure V-1-3 Structural change of urban population and rural population in China, 2003~2008

Figure V-1-4 Resident income in China, 2003~2008

Figure V-1-5 Population structure by age in China, 2003 ~2008

Figure V-3-1 Forecast on flame retardants' output and consumption in China, 2010~2014

Figure V-3-2 Consumption structure of flame retardants in China, 2014

Figure V-3-3 Output structure of flame retardants in China, 2014

## **COMPANIES MENTIONED**

Shandong Moris Chemical Co., Ltd., Shandong Shouguang Weidong Chemical Co., Ltd., Jiangsu Yoke Technology Co., Ltd., Zhejiang Wansheng Chemical Co., Ltd., Guangdong Kingfa Sci &Tech.Co., Ltd.

### I would like to order:

**Product name:** Survey of Flame Retardants Industry in China  
**Product link:** <http://marketpublishers.com/r/S986083EC23EN.html>  
**Product ID:** S986083EC23EN  
**Price:** US\$ 8,000.00 (Single User License / Electronic Delivery)

*If you want to order Corporate License or Hard Copy, please, contact our Customer Service: [office@marketpublishers.com](mailto:office@marketpublishers.com)*

### Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click 'BUY NOW' button on product page <http://marketpublishers.com/r/S986083EC23EN.html>

### To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:  
Last name:  
E-mail:  
Company:  
Address:  
City:  
Zip/Post Code:  
Country:  
Tel:  
Fax:  
Your message:

\* All fields are required

**Customer Signature** \_\_\_\_\_

Please, note that by ordering from MarketPublisher.com you are agreeing to our Terms & Conditions at [http://marketpublishers.com/docs/terms\\_conditions.html](http://marketpublishers.com/docs/terms_conditions.html)

To place an order via fax simply print this form, fill in the information below and fax the completed form to **+44 20 7900 3970**

