# **Global and China Flame Retardant Industry**

Report, 2014-2016

Jul. 2014



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#### STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

#### **REPORT OBJECTIVES**

- To establish a comprehensive, factual, annually updated and costeffective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- To help company to succeed in a competitive market, and

#### **METHODOLOGY**

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

#### **INFORMATION SOURCES**

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

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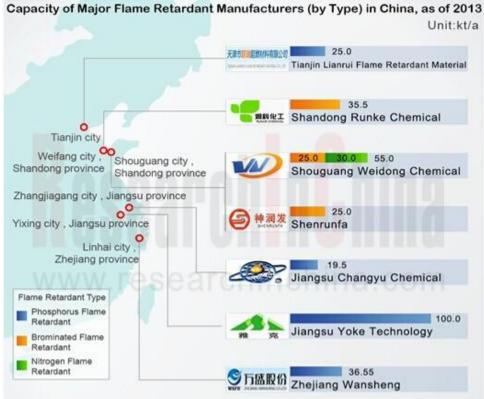
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## Abstract

Flame retardant is a general term for the substances that prevent and reduce flammability of fuels or delay their combustion. Over the past 30 years, flame retardant and flame-resisting materials have played an important role in reducing losses of life and property caused by fire disasters. In 2005-2013, the market volume of global flame retardant grew at a CAGR of about 4.2%, to 2.055 million tons in 2013.

The global flame retardant market is mainly dominated by Albemarle, Chemtura and Clariant from the United States, Israel's ICL, Japan's ADEKA and Jiangsu Yoke Technology and Zhejiang Wansheng from China, which leads to a relatively higher concentration.

In terms of consumption regions, despite a higher consumption proportion in Europe, America and Japan, these markets were stable and their demands grew at a relatively slow pace. However, the Asian region including China but excluding Japan showed a double-digit growth, making it the most important driving force of the flame retardant markets around the world. In 2013, this region accounted for a roughly 31.1% market share of the global flame retardant, up nearly 13 percentage points from 2005.



Source: Global and China Flame Retardant Industry Report, 2014-2016; ResearchInChina

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Flame retardant can fall into halogen flame retardant (chlorine-based and bromine-based, etc.), phosphorus flame retardant and inorganic flame retardant, etc.

Bromine-based Flame Retardant: As a traditional variety, bromine-based flame retardant absolutely dominated general-purpose plastics and engineering plastics. But due to an increasingly stringent requirement from environmental protection, bromine-based flame retardants including HBCD and DECA are being phased out. The U.S. and Canadian governments had long reached agreement with Albemarle, Chemtura and ICL that the three would retreat from the DECA production agreement by the end of 2013. Japan began to prohibit HBCD in May 2014.

Organophosphorus Flame Retardant: With obvious advantages like environmental friendliness and safety, organophosphorus flame retardant is gradually substituting for halogen flame retardant (chlorine-based and bromine-based, etc.), with the market volume of global organophosphorus flame retardant in 2010-2013 representing a CAGR of 9.8%. And in 2013 alone, the market volume of organophosphorus flame retardant reached some 620 kt, accounting for 30% of the global total.

Although China's flame retardant industry started later than Europe, the United States and Japan, the output of flame retardant in China has maintained a rapid growth rate in recent years, with the output for 2013 approximating 987 kt, up 15.2% from a year earlier. At present, the demand for flame retardant in China accounts for roughly 60% of its total output. And as the industries like energy saving in buildings, electronics & electrical appliances and automobile manufacturing develop and the State adopted increasingly stringent policies on flame retardant, the market potential of flame retardant in China will be further released.

Currently, the Chinese flame retardant market is still dominated by halogen flame retardant (chlorine-based and bromine-based, etc.). However, in view of the factors such as environmental policies and market demand, a growing number of Chinese manufacturers have begun to turn to non-halogen flame retardant, especially organophosphorus flame retardant products. In 2013, the output of organophosphorus flame retardant in China reached more than 200 kt.<BR> <BR>As the leading organophosphorus flame retardant manufacturer in China, Jiangsu Yoke Technology achieved an annual capacity of 100 kt in 2013 and planned to expand this capacity to around 160 kt/a. With a capacity of 36.55 kt/a, Zhejiang Wansheng ranked second in the organophosphorus flame retardant market in China. Besides, the company is planning to increase its capacity to 53.5 kt/a.

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Global and China Flame Retardant Industry Report, 2014-2016 highlights the following:

Policy environment, global market, status quo, competition pattern and outlook of China flame retardant industry;

Supply & demand, competition pattern, and development of flame retardant market segments (including brominated flame retardant, phosphorus flame retardant and inorganic flame retardant) in China and beyond;

•)Operation, flame retardant business, business in China, and development prospects of 13 global and 6 Chinese flame retardant enterprises.

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