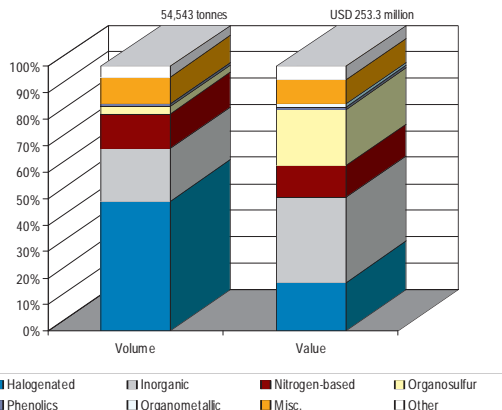


Specialty Biocides 2008: China Market Analysis and Opportunities

2008 Fact Sheet

The Market

Strong growth within the Chinese biocides market continues into 2008 and beyond. Key growth drivers include the growth of key end-use industries, water shortages encouraging the re-use of water, thus increasing chemical usage, and an increase in disposable income driving consumer-related markets.



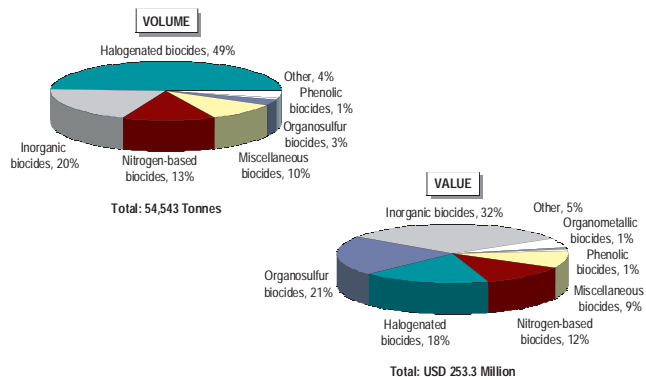
Companies

The supplier base is fragmented. However, consolidation has occurred within the industrial preservation category since 2004. Local suppliers dominate the halogenated and nitrogen-based biocides market. However, multinationals dominate the organosulfur, organometallic, and inorganic biocide markets.

Application segment	2004		2007	
	Top five companies	Combined market share, % (value basis)	Top five companies	Combined market share, % (value basis)
Industrial preservation	American Chemet Rohm and Haas Nordox Taixing Smelting Arch Chemicals	55	American Chemet Taixing Smelting Nordox Japan Furukawa Arch Chemical	72
Water treatment	Beijing Tianqing Dalian Xingyuan Wuhan Organic Industrial Baoding Sunlight Buckman Laboratories	31	Buckman Laboratories Dow Chemical Beijing Tianqing Hengsheng Huode Nannin Chemical Group	29
Other	Wuhan Organic Industrial Hebei Jiheng Chemical Xuzhou KWS Nannin Chemical Group Buckman Laboratories	40	Buckman Laboratories Heze Huayi Changzhou Keling Nannin Chemical Group Guangdong Petrochemical	28

Products

Halogenated biocides are the leading category of specialty biocides on a volume basis in China, driven by the relatively high volumes of chloroisocyanurates consumed in aquaculture, water treatment, and hospital and medical disinfectant applications. On a value basis, inorganic products lead, accounting for a 32% share of the market. Leading applications for inorganic biocides include antifoulant marine, plastic, and wood.



Future Outlook

In June 2008, the World Bank reported that China's economic growth had moderated to a more sustainable pace in line with slower global growth. However, China's GDP growth will continue in 2008 at 9.8%, due to a strong service sector.

