

NEW Industry forecasts for 2013 & 2018

Food Safety Products in China

Study # 2525

July 2009

\$5200

Demand to increase 15% annually through 2013

Demand for food safety products in China is forecast to grow 15 percent per annum through 2013 to 13 billion yuan. Growth will be driven by the continuing expansion of food and beverage output, mainly in the processed food, beverage and dairy product segments that are more intensive users of these products. A greater focus on food safety and supply chain security by larger food processing firms in China will also boost gains. This will be partly in response to enhanced government regulation, in particular the Food Safety Law introduced in 2009. Consumer concerns in both domestic and export food markets following a series of food safety scares involving Chinese food will also prompt spending on food safety products by food industry participants.

However, despite this healthy outlook, there remain a number of factors restraining the overall level of food safety product sales in China. First, apart from large food processors and government inspection agencies, awareness of food safety practices in China is low. In particular, fragmented foodservice and agricultural sectors consume far lower amounts of food safety products than would be expected given their output levels. Furthermore, there remains a widespread culture, particularly among smaller food producers in China, of using hazardous ingredients and risky production processes in order to maximize short-term company profits. Enhancing responsibility and food safety awareness in China will be crucial for ensuring the sustainability of future gains in the food safety product industry. In addition to



these factors, there also remain doubts as to the effectiveness of the local implementation of the new Food Safety Law.

Tracking product segment to exhibit strongest growth

Disinfection products will remain the largest food safety product category. Gains will be driven by a greater use of disinfectants and sanitizers in food processing plants, as well as by fast growing demand for pasteurization equipment by dairy and beverage firms in China. Strong advances in sales of diagnostic testing products will be driven by the increasing numbers of food processor and government agency tests for pathogenic and non-pathogenic contaminants.

The strongest gains will be in the tracking product segment, with demand for RFID

and other smart labels and tags, as well as tracking software systems, benefiting from concerns over supply chain security. Increases in the preservatives segment will lag overall gains to some extent, largely due to the more mature nature of this product segment. However, annual demand growth of almost 13 percent will be fueled by increases in processed food and beverage output, as well as by price gains for preservatives.

Food processing plants will remain largest market

Food processing plants are the largest market for food safety products in China, accounting for 85 percent of sales in 2008. Such dominance is due to relatively strong government oversight of these facilities and the high profile of these firms among consumers. The next largest category is government purchases, as tens of thousands of inspections are carried out around the country each year by local government agencies. The demand level for food safety products by foodservice establishments, retail, wholesale and distribution operations, and agricultural units is limited by low food safety awareness, low income levels and a lack of incentives to increase spending.

Study coverage

This new 252-page Freedonia industry study, *Food Safety Products in China*, is available for \$5200. It presents historical demand data (1998, 2003 and 2008) plus forecasts for 2013 and 2018 by product and by market. In addition, this study assesses key market environment factors, evaluates company market share and profiles 36 producers in the Chinese industry.

Copyright 2009 The Freedonia Group, Inc.

For complete details on any study visit www.freedoniagroup.com

#2525 - Food Safety Products in China

EXECUTIVE SUMMARY

1 Summary Table..... 3

MARKET ENVIRONMENT

General..... 4
Economic Overview..... 6
 Recent Economic Performance 6
 Economic Outlook 10
Demographic Overview 13
 Population Trends 13
 Households 16
Industrialization & Manufacturing Trends 17
Currency Exchange 20
Personal Income & Expenditure Trends 23
Agriculture Overview 26
 Historical Perspective 27
 Recent Developments & Policy Outlook 29
Agricultural Output Trends 33
 Crops & Planted Produce 35
 Animal Husbandry 37
 Meat & Poultry 38
 Raw Milk 40
 Eggs 41
 Fish & Seafood 42
Food & Beverage Industry Outlook 43
 Meat & Seafood 46
 Processed Food 47
 Beverages 49
 Dairy Products 51
 Other Food 54
Food Trade 55
 Imports 57
 Exports 58
Food Supply Chain Trends 59
 Agricultural Production/Commodity Distribution 61
 Food Processing & Wholesale Distribution 63
 Retail Distribution/Foodservice Establishments 65
Consumer Food & Beverage Expenditures 66
Historical Market Trends 67
Food Safety Incidents & Food
 Related Illness Trends 69
Regulatory Issues 71
International Activity & Foreign Trade 76

LIST OF TABLES & CHARTS:

1 Gross Domestic Product of China 12
2 Population of China 15
Cht Population of China by Age, 1998-2018 16
3 Households in China by Region 17
4 Manufacturing Value-Added in China 19
5 Chinese Currency Exchange
 Rates, 1998-2008 22
Cht Chinese Currency Exchange
 Rates, 1998-2008 23
6 Personal Income & Expenditures in China 26
7 Agricultural Output in China 35
8 Selected Crop & Planted Produce
 Output in China 36
9 Animal Husbandry in China 38
10 Fish & Seafood Output in China 43
11 Food & Beverage Production in China 45
12 Meat & Seafood Production in China 47
13 Processed Food Production in China 49
14 Beverage Production in China 51
15 Dairy Product Production in China 53
16 Other Food Production in China 55
17 Food & Beverage Supply
 & Demand in China 57

18 Food Imports to China 58
19 Food Exports from China 59
20 Consumer Food & Beverage
 Expenditures in China 67
21 Food Safety Product Market
 in China, 1998-2008 68
Cht Food Safety Product Market
 in China, 1998-2008 69

TECHNOLOGY OVERVIEW

General..... 79
Disinfection 81
Diagnostics 84
Tracking Products 87
Other..... 90

PRODUCTS

General..... 92
Disinfection Products 94
 Disinfectants & Sanitizers 96
 Chlorinated 98
 Iodophor 100
 Other Disinfectants & Sanitizers 102
 Disinfection Equipment 105
 Pasteurization 108
 Other 111
 Other Disinfection Products 113
Preservatives 114
 Biocides 117
 Antioxidants 119
Diagnostic Testing Products 121
 Pathogens 126
 General 128
 Pathogen-Specific 129
 Residue 130
 Other Diagnostic Testing Products 132
Tracking Products 135
 Software & Tracking Systems 137
 Smart Labels & Tags 139
 Bar Codes 141
 RFID Tags 142
 Smart Labels 143
Other..... 144

LIST OF TABLES & CHARTS:

1 Food Safety Product Demand
 in China by Type 93
Cht Food Safety Product Demand
 in China by Type, 2008 94
2 Disinfection Product Demand in China 95
3 Disinfectant & Sanitizer Demand in China 98
4 Chlorinated Disinfectant & Sanitizer
 Demand in China 100
5 Iodophor Disinfectant Demand in China 102
6 Other Disinfectant & Sanitizer
 Demand in China 105
7 Disinfection Equipment Demand in China 107
8 Other Disinfection Product
 Demand in China 114
9 Food & Beverage Preservative
 Demand in China 117
10 Biocide Preservative Demand in China 119
11 Antioxidant Preservative Demand in China 121
12 Diagnostic Testing Product
 Demand in China 126
13 Pathogen Diagnostic Testing Product
 Demand in China 128

14 Residue Diagnostic Testing Product
 Demand in China 132
15 Other Diagnostic Testing Product
 Demand in China 135
16 Tracking Product Demand in China 137
17 Software & Tracking System
 Demand in China 139
18 Smart Label & Tag Demand in China 141
19 Other Food Safety Product
 Demand in China 146

MARKETS

General..... 147
Food Processing Plants 150
 Beverages 153
 Processed Food 155
 Meat & Seafood 157
 Dairy Products 159
 Other 161
Government 163
Foodservice Establishments 164
Retail, Wholesale & Distribution 166
Agriculture 168

LIST OF TABLES & CHARTS:

1 Food Safety Markets in China 149
Cht Food Safety Markets in China, 2008 149
2 Food Processing Plant Market for
 Food Safety Products in China 152
Cht Food Processing Plant Market for
 Food Safety Products in China, 2008 153
3 Beverage Processing Market for
 Food Safety Products in China 155
4 Processed Food Processing Market for
 Food Safety Products in China 157
5 Meat & Seafood Processing Market for
 Food Safety Products in China 159
6 Dairy Product Processing Market for
 Food Safety Products in China 161
7 Other Food Processing Markets for
 Food Safety Products in China 162
8 Government Market for Food Safety
 Products in China 164
9 Foodservice Market for Food Safety
 Products in China 166
10 Retail, Wholesale & Distribution Market for
 Food Safety Products in China 168
11 Agricultural Market for Food Safety
 Products in China 169

INDUSTRY STRUCTURE

General..... 170
Industry Composition 171
Market Share 174
Competitive Strategies 176
Marketing & Distribution 178
Cooperative Agreements 179
Foreign Participation in China 180
 Legal & Regulatory Issues 180
 Joint Ventures 182
 Wholly-Owned Foreign Enterprises 184
 Representative Offices 185

LIST OF TABLES & CHARTS:

1 Revenue Data: Selected Food Safety
 Product Companies, 2008 173
Cht Food Safety Product Market Share
 in China by Company, 2008 175

Company Profiles 186-252

TABLE IV-12

DIAGNOSTIC TESTING PRODUCT DEMAND IN CHINA (million yuan)

Item	1998	2003	2008	2013	2018
Food & Beverage Production (bil 2007¥) ¥ testing/000¥ food & bev					
Diagnostic Testing Product Demand					
By Function:					
Pathogen					
Residue					
Other					
By Type:					
Rapid Result					
Conventional					
By Application:					
Government					
Processing Plants					
Other					
% diagnostic testing					
Total Food Safety Product Demand					

SAMPLE TABLE
Provides historical data plus forecasts for 2013 and 2018; data illustrated with the aid of 60 tables and charts

PRODUCTS

Disinfectants & Sanitizers

Sales of disinfectants and sanitizers used in food safety applications Strong annual gains of food and beverage output by a wide range of government food safety sanitizers sold in China, bleach (sodium hypochlorite), benefiting from their safety. However, chlorine dioxide and other disinfectants are used in various applications.

Disinfectants and sanitizers are the primary means by which companies prevent microbial contamination of food. They can be used at all levels of food production, processing, delivery and preparation, reflecting their inexpensive nature, effectiveness and ease of use. Disinfectants and sanitizers covered here refer to products at the formulated level, that is, ready-to-use (or ready-to-dilute) disinfectant and sanitizer solutions.

The market for disinfectants and sanitizers in China is expected to receive a considerable boost going forward as increasing numbers of large

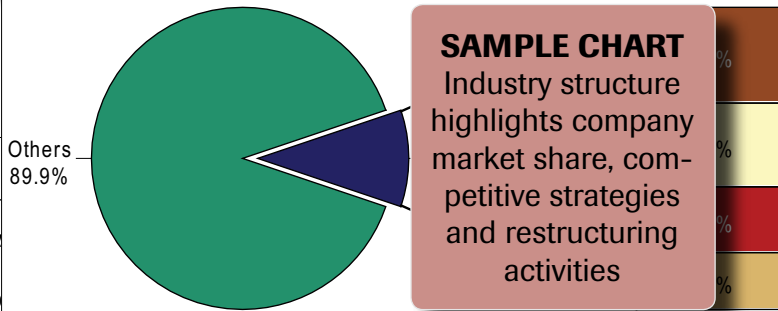
plans and increase employee activities. Increasing government awareness of the hazards of food safety previously been focused on help drive gains going forward. Implementation and anticipated growth of firms will restrain gains. In addition, medium scale food processors will need to improve their

© Copyright by The Freedonia Group, Inc.

SAMPLE PAGE
Explanations that support each table's numbers and projections

CHART VI-1

FOOD SAFETY PRODUCT MARKET SHARE IN CHINA BY COMPANY, 2008 (6.5 billion yuan)



SAMPLE CHART
Industry structure highlights company market share, competitive strategies and restructuring activities

COMPANY PROFILES

Zhuhai Joint Bar Code Auto-identity System
Third Floor, East Tower
No. 130 Xinghua Road
Xiangzhou, Zhuhai, Guangdong 51900
China
86-756-6110-508
<http://www.jointbarcode.com>

Annual Sales: (estimated)
Employment:
Key Products: printers, scanners, portable data collection terminals
International Customers:
Zhuhai Joint Bar Code Auto-identity System Limited sells bar code automatic recognition equipment and related software. The Company is privately held.

COMPANY PROFILES
Profiles of 36 firms competing in the Chinese industry

The Company is active in the Chinese food safety industry primarily through the marketing of radio frequency identification (RFID) bar code printers, scanners, portable data collection terminals and related products made by third parties. Zhuhai Joint Bar Code Auto-identity System also makes certain products, including CPM-100HC multifunctional tab printers.

Among Zhuhai Joint Bar Code Auto-identity System's offerings are ZEBRA RFID bar code printers, which are manufactured by Zebra Technologies Corporation (Lincolnshire, Illinois). These bar code printers provide improvements in accuracy and supply chain visibility, and are designed to digitally encode data in an RFID tag or smart label and wirelessly transmit that data to a reader. Additionally, ZEBRA RFID bar code printers can be

TABLE V-2

FOOD PROCESSING PLANT MARKET FOR FOOD SAFETY PRODUCTS IN CHINA (million yuan)

Item	1998	2003	2008	2013	2018
Food/Beverage Production (bil 2007¥) ¥ food safety/000¥ food & bev					
Food Processing Plant Market					
By Application:					
Beverages					
Processed Food					
Meat & Seafood					
Dairy Products					
Other					
By Product:					
Disinfection Products					
Preservatives					
Diagnostic Testing Products					
Tracking Products					
Other					
% processing plant					
Total Food Safety Product Demand					

“Demand for food safety products in food processing plants in China is forecast to rise 14.5 percent per year through 2013 to ¥10.9 billion. Growth will be fueled by expanding food and beverage output, which requires capacity expansions and the operating of new processing plants. In addition, increasing food safety expenditures will be driven by ...”
--Section V, pg. 150

Order Information

To order fill out the coupon below and mail to The Freedonia Group, or place your order by phone **toll free (800) 927-5900 (US)** or **(440) 684-9600**, or by fax **(440) 646-0484**, or by e-mail at **info@freedoniagroup.com**

Free Handling and Shipping

There is **NO** charge for handling and UPS shipping in the US. Expect delivery in 3 to 5 days. Outside the US, Freedonia provides free airmail service. If you require express delivery, Freedonia provides this to you at cost.

Save Fifteen Percent

If you order three (3) different titles at the same time, you can receive a discount of 15%. **If your order is accompanied by a check, you may take a 5% cash discount** (discounts do not apply to corporate use licenses).

Credit Card Orders

You may charge your order to either **American Express, MasterCard or Visa**. Please include your credit card account number, expiration date and your signature.

Orders Outside of the US

Checks must be paid in US funds, drawn against a US bank and mailed directly to The Freedonia Group. For wire transfer instructions please contact our customer service department at info@freedoniagroup.com. Or you may use a credit card.

Corporate Use License

Now every decision maker in your organization can act on the key intelligence found in all Freedonia studies. For an additional \$2,300 you receive unlimited use of an electronic version (PDF) of the study. Place it on your Intranet, e-mail it to coworkers around the world, or print it as many times as you like! Order it today.

Online Access

The complete text and tables from our studies and reports can be purchased at our website **www.freedoniagroup.com** and through major commercial online hosts.

Other Titles from The Freedonia Group

Active & Intelligent Packaging

US demand for active and intelligent packaging will climb 8.3% yearly through 2013, driven in part by food safety concerns and losses in perishables. Intelligent packaging will grow the fastest, propelled by time-temperature indicators and other products that offer product differentiation, traceability and interactive features. This study analyzes the \$1.3 billion US active and intelligent packaging industry, with forecasts for 2013 and 2018 by product and market. It also evaluates market share and profiles industry players.

#2515..... 07/2009..... \$4700

Meat, Poultry & Seafood Packaging

US demand for meat, poultry and seafood packaging is forecast to grow 3.5% yearly through 2013. Gains will be driven in part by the continuing shift to higher cost case-ready packaging by many retailers as a means to reduce in-store labor costs. Flexible packaging will outpace the larger rigid packaging segment. This study analyzes the \$7.7 billion US meat packaging industry, with forecasts for 2013 and 2018 by technology and raw material, product, application and market. It also evaluates market share and profiles industry players.

#2522..... 06/2009..... \$4700

Food Safety Products

US demand for food safety products will grow 6.5% annually through 2012, driven by rising food safety concerns and new rules and regulations. Disinfection products will remain the largest segment and benefit from relatively new technologies such as ultraviolet and ozone equipment. Smart labels and tags will be the fastest growing products. This study analyzes the \$2.3 billion US food safety product industry, with forecasts for 2012 and 2017 by product and market. It also details market share and profiles major firms.

#2314..... 04/2008..... \$4500



Reliable industry analysis from the Freedonia China team

Freedonia's China office – staffed by a senior analyst from our US headquarters and experienced industry analysts from China and Europe – ensures you get the same reliable Freedonia studies, custom research and focus reports on China as you do on our US and World studies.

Need analysis on a topic not covered by Freedonia Industry Studies? Call Customer Service for details on **Freedonia Custom Research**

ORDER FORM

[Click here to purchase online](#)

Name: _____

Title: _____

Company: _____

Division: _____

Street: _____
(no PO Box please)

City/State/Zip: _____

Country: _____

Phone: _____ Fax: _____

e-mail: _____

TITLE

PRICE

Food Safety Products in China

\$5200

Corporate Use License (add to study price) + \$2300

___ Additional Print Copies @ \$500 each

Total (including selected options): \$ _____

Enclosed is my check (5% discount) drawn on a US bank and payable to The Freedonia Group, Inc., in US funds (Ohio residents add 7.75% sales tax)

Bill my company American Express MasterCard Visa

Credit Card #

MONTH YEAR
Expiration Date

Signature: _____

F-WEB

The Freedonia Group, Inc. 767 Beta Drive Cleveland, OH 44143-2326 USA **website:** www.freedoniagroup.com
phone: 800-927-5900 (US) or 440-684-9600 **fax:** 440-646-0484 **e-mail:** info@freedoniagroup.com