

## **Top 10 Food Safety Testing and Technologies Trends Market (Food Safety, GM Food Safety, Food Pathogen, Meat Speciation, Food Authenticity, Pesticide Residue, Mycotoxin, Allergen, Water, and Bottled Water) - Global Forecast to 2028**

Market Report | 2023-10-27 | 497 pages | MarketsandMarkets

### **AVAILABLE LICENSES:**

- Single User \$4950.00
- Multi User \$6650.00
- Corporate License \$8150.00
- Enterprise Site License \$10000.00

### **Report description:**

The food safety testing market is projected to grow at a CAGR of 8.2% from an estimated value of USD 22.7 billion in 2023 to reach USD 33.7 billion by 2028. The market for food safety testing has been experiencing significant growth in recent years due to several factors. One of the key drivers is the increasing demand for government regulations and standards that mandate food safety testing to ensure that food products meet safety and quality criteria. Compliance with these regulations is a significant driver of the market. Another factor contributing to the growth of the food safety testing market is that consumers are increasingly concerned about the safety and quality of the food they consume. They demand transparency, reliable labeling, and stringent safety measures, pushing food companies to invest in robust testing to meet these expectations.

"GMO food safety testing market to grow at the highest rate during the forecast period."

The GMO food safety testing market is projected to experience the highest growth rate during the forecast period. Public awareness and concerns about the safety of GM foods have grown over the years. Consumers want to know that GM foods are thoroughly tested and safe to eat. As a result, food companies and regulatory agencies invest in GMO food safety testing to address these concerns. Also, in some regions, labeling requirements mandate the identification of GMO ingredients in food products. This necessitates testing to confirm the presence or absence of GMO components in various food items, ensuring accurate product labeling and transparency.

"Food pathogen testing market to be the largest subcategory market among food safety testing during the forecast period."

The food pathogen testing market is projected to emerge as the largest subcategory market within the food safety testing sector during the forecast period. Regulatory bodies worldwide impose strict guidelines and standards for pathogen testing to ensure food safety. Compliance with these regulations is a significant driver of the market. Also, Notable foodborne illness outbreaks and product recalls highlight the critical importance of robust pathogen testing in preventing and mitigating outbreaks and

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

maintaining the reputation of food companies. These drivers collectively contribute to the growth of the food pathogen testing market, as it plays a crucial role in safeguarding public health and ensuring the safety of the global food supply.

"In the food allergen testing industry, Europe is estimated to be the largest market in 2023."

Several factors contribute to Europe's dominance in the food allergen testing market. First, Europe has a well-established and rigorous regulatory framework when it comes to food safety and allergen labeling. The European Union (EU) has comprehensive allergen labeling requirements, including the "EU Food Information for Consumers Regulation," which mandates clear and accurate allergen information on food labels. This strict regulatory environment drives the demand for advanced allergen testing methods to ensure compliance. Second, Europe has a high level of consumer awareness and concern regarding food allergies. The prevalence of food allergies, combined with a strong consumer focus on health and dietary preferences, has increased the demand for accurate allergen testing to guarantee that food products are safe for individuals with allergies.

The top 10 food safety testing and technologies trends market is segmented market-wise, with a detailed analysis of each market by studying the individual competitive landscapes.

The breakdown of the profile of primary participants is as follows:

- By Company Type: Tier 1 - 25 %, Tier 2 - 35%, and Tier 3 - 40%
- By Designation: Director-level - 30%, C-level - 25%, and Manager-level - 45%
- By Region: North America - 17%, Europe - 28%, Asia Pacific - 33%, and RoW - 22%

Leading players profiled in this report

- SGS Societe Generale De Surveillance SA (Switzerland)
- Bureau Veritas (France)
- Intertek Group PLC (UK)
- Eurofins Scientific (Luxembourg)
- ALS (Australia)
- TUV Nord Group (Germany)
- AsureQuality (New Zealand)
- Merieux NutriSciences Corporation (US)
- Microbac Laboratories, Inc. (Pennsylvania)
- IFP Institute for Product Quality GmbH (Germany)
- EMSL Analytical, Inc. (US)
- Symbio Laboratories (Australia)
- Hill Laboratories (New Zealand)
- Thermo Fisher Scientific Inc. (US)
- Bio-Rad Laboratories, Inc. (US)
- Romer Labs (Austria)
- FoodChain ID (US)
- Nova Biologicals (US)
- Certified Laboratories (US)
- IEH Inc. (US)
- PrimusLabs (US)
- PT Seafood Inspection Laboratory (Indonesia)
- Eureka (India)
- BioMedal (Spain)
- Element Materials Technology (UK)

Research Coverage

This report segments the food safety testing market on the basis of key trends. In terms of insights, this research report focuses on various levels of analyses-competitive landscape, end-use analysis, and company profiles-which together comprise and discuss the basic views on the emerging & high-growth segments of the food safety testing industry, the high-growth regions, countries, government initiatives, market disruption, drivers, restraints, opportunities, and challenges.

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

## Reasons to buy this report

- To get a comprehensive overview of the food safety testing market
- To gain wide-ranging information about the top players in this industry, their product portfolios, and key strategies adopted by them
- To gain insights about the major countries/regions, in which the food safety testing market is flourishing

The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall top 10 food safety testing and technologies trends market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

- Analysis of key drivers (Worldwide increase in a foodborne illness outbreaks), restraints (Lack of food control infrastructure & resources in developing countries), opportunities (Increasing consumer awareness of food safety testing), and challenges (Lack of harmonization of food safety regulations) influencing the growth of the top 10 food safety testing and technologies trends.
- Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the top 10 food safety testing and technologies trends.
- Market Development: Comprehensive information about lucrative markets - the report analyses the top 10 food safety testing and technologies trends across varied regions.
- Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the top 10 food safety testing and technologies trends.
- Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players like SGS Societe Generale De Surveillance SA (Switzerland), Bureau Veritas (France), Intertek Group PLC (UK), Eurofins Scientific (Luxembourg), and ALS (Australia).

## Table of Contents:

1□INTRODUCTION□	55
1.1□STUDY OBJECTIVES□	55
1.2□MARKET DEFINITIONS□	55
1.3□YEARS CONSIDERED□	56
1.4□CURRENCY CONSIDERED□	57
TABLE 1□USD EXCHANGE RATES, 2018-2022□	57
1.5□STAKEHOLDERS□	57
1.6□SUMMARY OF CHANGES□	58
1.7□RECESSION IMPACT□	58
2□RESEARCH METHODOLOGY□	59
2.1□RESEARCH DATA□	59
FIGURE 1□TOP 10 FOOD SAFETY TESTING AND TECHNOLOGIES TRENDS MARKET: RESEARCH DESIGN□	59
2.1.1□SECONDARY DATA□	60
2.1.1.1□Key data from secondary sources□	60
2.1.2□PRIMARY DATA□	60
2.1.2.1□Breakdown of primaries□	61
2.1.3□MARKET SIZE ESTIMATION□	62
FIGURE 2□MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH□	63
FIGURE 3□MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH□	63
2.2□MARKET BREAKDOWN AND DATA TRIANGULATION□	64
FIGURE 4□DATA TRIANGULATION□	64
2.3□RESEARCH ASSUMPTIONS AND LIMITATIONS□	65

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

2.3.1	RESEARCH ASSUMPTIONS	65
2.3.2	RESEARCH LIMITATIONS	65
2.4	IMPACT OF RECESSION ON TOP 10 FOOD SAFETY TESTING AND TECHNOLOGIES TRENDS MARKET	66
2.4.1	MACRO INDICATORS OF RECESSION	66
FIGURE 5	MAJOR INDICATORS OF RECESSION	66
FIGURE 6	GLOBAL INFLATION RATE, 2011-2021	67
FIGURE 7	GLOBAL GDP, 2011-2021 (USD TRILLION)	68
FIGURE 8	IMPACT OF RECESSION INDICATORS ON TOP 10 FOOD SAFETY TESTING AND TECHNOLOGY TRENDS MARKET	69
FIGURE 9	GLOBAL FOOD SAFETY TESTING MARKET: PREVIOUS FORECAST VS. RECESSION FORECAST	70
3	EXECUTIVE SUMMARY	71
FIGURE 10	FOOD SAFETY TESTING MARKET, BY TARGET TESTED	71
FIGURE 11	FOOD SAFETY TESTING MARKET, BY REGION	72
FIGURE 12	FOOD AUTHENTICITY MARKET, BY TARGET TESTED	73
FIGURE 13	WATER TESTING & ANALYSIS MARKET, BY APPLICATION	73
FIGURE 14	FOOD SAFETY TESTING MARKET, BY REGION	74
4	PREMIUM INSIGHTS	75
4.1	ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN FOOD SAFETY TESTING MARKET	75
FIGURE 15	INCREASING PREVALENCE OF FOODBORNE ILLNESSES WORLDWIDE TO DRIVE DEMAND	75
4.2	FOOD SAFETY TESTING MARKET IN NORTH AMERICA, BY TECHNOLOGY AND APPLICATION	76
FIGURE 16	PCR-BASED TESTING AND MEAT, POULTRY & SEAFOOD SEGMENTS ACCOUNTED FOR LARGEST SHARES OF NORTH AMERICAN FOOD SAFETY TESTING MARKET IN 2022	76
4.3	BOTTLED WATER TESTING EQUIPMENT MARKET, BY TECHNOLOGY	76
FIGURE 17	CHROMATOGRAPHY SEGMENT TO HOLD MAJOR SHARE OF BOTTLED WATER TESTING EQUIPMENT MARKET IN 2023	76
4.4	MEAT SPECIATION MARKET, BY FORM	77
FIGURE 18	RAW SEGMENT TO ACCOUNT FOR MAJOR SHARE OF MEAT SPECIATION MARKET IN 2023	77
5	MARKET OVERVIEW	78
5.1	INTRODUCTION	78
5.2	MACROECONOMIC INDICATORS	79
5.2.1	LARGE-SCALE OUTBREAKS OF FOODBORNE DISEASES GLOBALLY	79
FIGURE 19	MAJOR PATHOGENS RESPONSIBLE FOR FOODBORNE ILLNESSES IN US, 2018	80
FIGURE 20	NUMBER OF CASES OF FOODBORNE DISEASES, BY REGION, 2020	80
5.2.2	RAPID EXPANSION OF FOOD TRADE ACROSS BORDERS	81
FIGURE 21	AGRI-FOOD EXPORT DATA, BY COUNTRY, 2020-2022 (USD MILLION)	82
FIGURE 22	IMPORT AND EXPORT SCENARIOS FOR PREPARED FOOD ITEMS, BY COUNTRY, 2022 (USD THOUSAND)	83
5.3	MARKET DYNAMICS	83
FIGURE 23	FOOD PATHOGEN TESTING MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES	83
5.3.1	DRIVERS	84
5.3.1.1	Prevalence of foodborne diseases linked to cross-contamination and complex supply chains	84
5.3.1.2	Advancements in testing technologies	85
5.3.1.3	High demand for convenience and packaged food products	86
5.3.1.4	Increased food recalls due to non-compliance with food safety standards	87
FIGURE 24	NUMBER OF RECALLED PRODUCTS IN US, 2012-2022	88
TABLE 2	MAJOR REASONS FOR FOOD RECALLS IN US, 2022	88
TABLE 3	LIST OF FOOD RECALLS, 2020-2021	89
FIGURE 25	FOOD RECALLS, BY SPECIES, 2022	91
5.3.1.5	Rising consumer awareness about food safety	91
5.3.2	RESTRAINTS	92

5.3.2.1	Inconsistent enforcement of hygiene and safety standards, inadequate infrastructure, and lack of coordination among stakeholders	92
5.3.2.2	Complexities associated with testing techniques	93
5.3.3	OPPORTUNITIES	94
5.3.3.1	Constant innovations in contaminant detection and food safety technologies	94
TABLE 4 TOP FOOD TESTING TECHNOLOGY INNOVATIONS		
5.3.3.2	Spike in food safety concerns after COVID-19	94
5.3.4	CHALLENGES	96
5.3.4.1	Inflated costs associated with procurement of food and water testing equipment	96
5.3.4.2	Varying results with different testing methods	97
6	INDUSTRY TRENDS	98
6.1	INTRODUCTION	98
6.2	SUPPLY CHAIN ANALYSIS	99
6.2.1	UPSTREAM PROCESSES	99
6.2.1.1	Research and development (R&D)	99
6.2.1.2	Production	99
6.2.2	MIDSTREAM PROCESSES	99
6.2.2.1	Processing and transforming	99
6.2.2.2	Transportation	99
6.2.3	DOWNSTREAM PROCESSES	99
6.2.3.1	Final preparation	99
6.2.3.2	Distribution	99
FIGURE 26 FOOD SAFETY TESTING MARKET: SUPPLY CHAIN ANALYSIS		
FIGURE 27 FOOD SAFETY MANAGEMENT SYSTEM (FSMS)		
6.3	VALUE CHAIN ANALYSIS	101
6.3.1	RAW MATERIAL PROVIDERS	101
6.3.2	FOOD AND BEVERAGE COMPANIES	101
6.3.3	PRODUCT DISTRIBUTORS	102
FIGURE 28 FOOD SAFETY TESTING MARKET: VALUE CHAIN ANALYSIS		
6.4	TECHNOLOGY ANALYSIS	103
6.4.1	FOURIER TRANSFORM INFRARED (FTIR)	103
6.4.2	MICROARRAY	103
6.4.3	PHAGE	103
6.4.4	BIOCHIP	103
6.4.5	BIOSENSOR	104
6.4.6	FLOW CYTOMETRY	104
6.4.7	NUCLEAR MAGNETIC RESONANCE (NMR)	104
6.4.8	NEAR-INFRARED SPECTROSCOPY (NIRS)	104
6.4.9	INDUCTIVELY COUPLED PLASMA (ICP)	104
6.5	PATENT ANALYSIS	105
TABLE 5 LIST OF MAJOR PATENTS PERTAINING TO FOOD PATHOGEN TESTING, 2013-2022		
FIGURE 29 PATENTS RELATED TO FOOD AND WATER SAFETY TESTING, 2012-2022		
FIGURE 30 REGIONAL ANALYSIS OF PATENTS RELATED TO FOOD AND WATER SAFETY TESTING		
6.6	TRADE ANALYSIS	108
FIGURE 31 IMPORT DATA FOR INSTRUMENTS AND APPARATUS USED IN PHYSICAL AND CHEMICAL ANALYSES, 2018-2022 (USD THOUSAND)		
FIGURE 32 EXPORT DATA FOR INSTRUMENTS AND APPARATUS USED IN PHYSICAL AND CHEMICAL ANALYSES, 2018-2022 (USD THOUSAND)		

THOUSAND)	109
6.7	KEY STAKEHOLDERS AND BUYING CRITERIA
6.7.1	KEY STAKEHOLDERS IN BUYING PROCESS
FIGURE 33	INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TECHNOLOGIES
TABLE 6	INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TECHNOLOGIES (%)
6.7.2	BUYING CRITERIA
TABLE 7	KEY CRITERIA FOR SELECTING SUPPLIER/VENDOR FOR TECHNOLOGIES
FIGURE 34	KEY CRITERIA FOR SELECTING SUPPLIER/VENDOR FOR TECHNOLOGIES
6.8	TRENDS/DISRUPTIONS IMPACTING CUSTOMER BUSINESS
FIGURE 35	FOOD SAFETY TESTING MARKET: TRENDS AND DISRUPTIONS IMPACTING CUSTOMER BUSINESS
6.9	ECOSYSTEM/MARKET MAP
FIGURE 36	FOOD SAFETY TESTING MARKET: MARKET MAP
6.10	CASE STUDY ANALYSIS
TABLE 8	EUROFINS MICROBIOLOGY LABORATORY NETWORK REDUCED TESTING TIME WITH RHEONIX LISTERIA PATTERNALERT ASSAY
TABLE 9	EUROFINS REDUCED PRODUCTION TO LOGISTICS TURNAROUND TIME WITH SCIENTIFIC EXPRESSMICRO SERVICE
TABLE 10	SUNSHINE MILLS APPROACHED BARROW-AGEE LABORATORIES TO MEET QUALITY TESTING NEEDS
6.11	PORTER'S FIVE FORCES ANALYSIS
TABLE 11	FOOD SAFETY TESTING MARKET: PORTER'S FIVE FORCES ANALYSIS
6.11.1	INTENSITY OF COMPETITIVE RIVALRY
6.11.2	BARGAINING POWER OF BUYERS
6.11.3	BARGAINING POWER OF SUPPLIERS
6.11.4	THREAT OF SUBSTITUTES
6.11.5	THREAT OF NEW ENTRANTS
6.12	KEY CONFERENCES AND EVENTS, 2023-2024
TABLE 12	FOOD SAFETY TESTING MARKET: LIST OF KEY CONFERENCES AND EVENTS, 2023-2024
6.13	REGULATORY LANDSCAPE
6.13.1	REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS
TABLE 13	NORTH AMERICA: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS
TABLE 14	EUROPE: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS
TABLE 15	ASIA PACIFIC: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS
TABLE 16	SOUTH AMERICA: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS
6.13.2	REGULATORY FRAMEWORK FOR FOOD SAFETY TESTING
6.13.2.1	International regulatory bodies for food safety
6.13.2.1.1	Codex Alimentarius Commission (CAC)
6.13.2.1.2	Global Food Safety Initiative (GFSI)
6.13.2.2	North America
6.13.2.2.1	US regulations
6.13.2.2.2	Federal legislation
6.13.2.2.2.1	State legislation
6.13.2.2.2.2	Food safety in retail food
6.13.2.2.2.3	Food safety in trade
6.13.2.2.2.4	HACCP regulation in US
6.13.2.2.2.5	US regulation for foodborne pathogens in poultry
6.13.2.2.2.6	Food safety regulations for fruit and vegetable growers
TABLE 17	FEDERAL FOOD, DRUG, AND COSMETIC ACT, BY TOLERANCE OF RAW AND PROCESSED FOOD PRODUCTS
6.13.2.2.3	Canada

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

6.13.2.2.4	Mexico	127
6.13.2.3	Europe	127
6.13.2.3.1	European Union regulations	127
6.13.2.3.2	Microbiological criteria regulation	128
6.13.2.3.3	Melamine legislation	128
TABLE 18 MAXIMUM LEVEL FOR MELAMINE AND STRUCTURAL ANALOGS 128		
6.13.2.3.4	General Food Law for food safety	128
6.13.2.3.5	Germany	129
6.13.2.3.6	UK	129
6.13.2.3.7	France	130
6.13.2.3.8	Italy	130
6.13.2.3.9	Poland	130
6.13.2.4	Asia Pacific	131
6.13.2.4.1	China	131
6.13.2.4.1.1	Regulatory bodies for food safety	131
6.13.2.4.1.2	Major efforts of China to standardize food safety system	132
6.13.2.4.2	Japan	132
6.13.2.4.3	India	132
6.13.2.4.3.1	Food safety standards amendment regulations, 2012	133
6.13.2.4.3.2	Food safety standards amendment regulations, 2011	133
6.13.2.4.3.3	Food Safety and Standards Act, 2006	133
6.13.2.4.4	Australia	134
6.13.2.4.4.1	Food standards in Australia and New Zealand	134
6.13.2.4.5	New Zealand	135
6.13.2.4.6	Indonesia	136
6.13.2.4.6.1	General law for food safety	136
6.13.2.5	RoW	136
6.13.2.5.1	South Africa	136
6.13.2.5.1.1	International vs. local standards and legislations	136
6.13.2.5.1.2	Private standards in South Africa and requirements for product testing	137
6.13.2.5.2	Brazil	137
6.13.2.5.2.1	Ministry of Agriculture, Livestock and Food Supply (MAPA)	137
6.13.2.5.2.2	Ministry of Health (MS)	137
6.13.2.5.3	Argentina	138
6.13.3	REGULATORY FRAMEWORK FOR FOOD PATHOGEN TESTING	139
6.13.3.1	North America	139
6.13.3.1.1	US	139
6.13.3.1.2	Canada	141
6.13.3.1.3	Mexico	142
6.13.3.2	Europe	142
6.13.3.2.1	European Union	142
6.13.3.2.2	Germany	143
6.13.3.2.3	UK	143
6.13.3.2.4	France	144
6.13.3.2.5	Italy	144
6.13.3.2.6	Poland	144
6.13.3.3	Asia Pacific	145

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

6.13.3.3.1	China	145
6.13.3.3.2	Japan	146
6.13.3.3.3	India	146
6.13.3.3.4	Australia and New Zealand	148
6.13.3.4	South America	149
6.13.3.4.1	Brazil	149
6.13.3.4.2	Argentina	150
6.13.3.5	RoW	150
6.13.3.5.1	South Africa	150
6.13.4	REGULATORY FRAMEWORK FOR GMO FOOD SAFETY TESTING	151
6.13.4.1	Cartagena protocol	152
6.13.4.2	WTO regulations	152
6.13.4.3	North America	152
6.13.4.3.1	US	152
6.13.4.3.2	Canada	153
6.13.4.3.3	Mexico	153
6.13.4.4	Europe	154
6.13.4.5	Asia Pacific	155
6.13.4.5.1	GMO labeling regulations in Asia Pacific	155
TABLE 19	GMO LABELING THRESHOLD IN ASIA PACIFIC COUNTRIES	155
6.13.4.5.2	Japan	155
6.13.4.5.3	China	155
6.13.4.5.3.1	Responsible agencies	156
6.13.4.5.3.2	Other GMO provisions	156
6.13.4.5.3.3	Local rules	156
6.13.4.5.4	Australia and New Zealand	157
6.13.4.5.5	Russian federation	157
6.13.4.6	South America	158
6.13.4.6.1	Brazil	158
6.13.4.6.2	Argentina	158
6.13.4.7	RoW	158
6.13.4.7.1	Egypt	158
6.13.4.7.2	Israel	158
6.13.4.7.3	South Africa	159
6.13.5	REGULATORY FRAMEWORK FOR PESTICIDE RESIDUE SAFETY TESTING	159
6.13.5.1	International bodies for food safety standards and regulations	159
6.13.5.1.1	Codex Alimentarius Commission (CAC)	159
6.13.5.1.2	Global Food Safety Initiative (GFSI)	160
6.13.5.2	North America	160
6.13.5.2.1	US Environmental Protection Agency (EPA)	160
6.13.5.2.2	Canada	162
6.13.5.2.3	Mexico	163
6.13.5.3	Europe	163
6.13.5.4	General Food Law for food safety	164
6.13.5.4.1	Germany	165
6.13.5.4.2	UK	165
6.13.5.4.3	France	166

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com



6.13.5.5	Asia Pacific	166
6.13.5.5.1	China	166
6.13.5.5.2	Japan	167
6.13.5.5.3	India	167
6.13.5.5.4	Australia	168
6.13.5.5.5	New Zealand	168
6.13.5.6	RoW	169
6.13.5.6.1	Brazil	169
6.13.5.6.2	South Africa	169
6.13.6	REGULATORY FRAMEWORK FOR MYCOTOXIN TESTING	169
TABLE 20	AFM1 REGULATORY LIMITS FOR DAIRY PRODUCTS	170
6.13.6.1	Factors affecting constitution of mycotoxin regulations in food and feed	171
6.13.6.2	International bodies for food safety standards and regulations	172
6.13.6.2.1	Codex Alimentarius Commission (CAC)	172
6.13.6.3	North America	172
6.13.6.3.1	US regulations	172
TABLE 21	AFLATOXIN B1 AND M1 REGULATORY LIMITS FOR FOOD AND FEED IN US	174
TABLE 22	DEOXYNIVALENOL REGULATORY LIMITS FOR FOOD AND FEED IN US	174
TABLE 23	FUMONISIN B1, B2, AND B3 REGULATORY LIMITS FOR FOOD AND FEED IN US	175
6.13.6.3.2	Canada	175
6.13.6.3.3	Mexico	176
6.13.6.4	Europe	176
TABLE 24	AFLATOXIN B1 AND M1 REGULATORY LIMITS FOR FOOD AND FEED IN EUROPEAN UNION	177
TABLE 25	FUMONISIN B1 AND B2 REGULATORY LIMITS FOR FOOD AND FEED IN EUROPEAN UNION	178
TABLE 26	OCHRATOXIN REGULATORY LIMITS FOR FOOD AND FEED IN EUROPEAN UNION	179
TABLE 27	CITRININ, PATULIN, AND TROPANE ALKALOIDS REGULATORY LIMITS FOR FOOD IN EUROPEAN UNION	180
TABLE 28	ZEARALENONE REGULATORY LIMITS FOR FOOD AND FEED IN EUROPEAN UNION	180
TABLE 29	T-2 AND HT-2 REGULATORY LIMITS FOR FOOD AND FEED IN EUROPEAN UNION	181
TABLE 30	DEOXYNIVALENOL REGULATORY LIMITS FOR FOOD AND FEED IN EUROPEAN UNION	181
6.13.6.4.1	Toxins regulations	183
TABLE 31	COMMISSION REGULATION FOR OCHRATOXIN A	184
6.13.6.4.2	Fusarium toxins	184
6.13.6.4.3	Aflatoxins	184
6.13.6.4.4	Germany	184
6.13.6.4.5	UK	185
6.13.6.5	Asia Pacific	185
TABLE 32	AFLATOXIN B1 AND M1 REGULATORY LIMITS FOR FOOD AND FEED IN JAPAN	185
TABLE 33	DEOXYNIVALENOL REGULATORY LIMITS FOR FOOD AND FEED IN JAPAN	185
TABLE 34	AFLATOXIN B1 AND M1 REGULATORY LIMITS FOR FOOD AND FEED IN INDONESIA	186
TABLE 35	MYCOTOXIN REGULATORY LIMITS FOR FOOD IN INDONESIA	186
TABLE 36	MYCOTOXIN REGULATORY LIMITS FOR FOOD IN MALAYSIA	187
TABLE 37	MYCOTOXIN REGULATORY LIMITS FOR FOOD IN SOUTH KOREA	187
6.13.6.5.1	China	189
TABLE 38	AFLATOXIN B1 AND M1 REGULATORY LIMITS FOR FOOD AND FEED IN CHINA	190
TABLE 39	DEOXYNIVALENOL REGULATORY LIMITS FOR FOOD AND FEED IN CHINA	191
TABLE 40	OCHRATOXIN REGULATORY LIMITS FOR FOOD AND FEED IN CHINA	191
TABLE 41	ZEARALENONE REGULATORY LIMITS FOR FOOD AND FEED IN CHINA	191

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

6.13.6.5.2	India	191
6.13.6.6	Food Safety Standards Amendment Regulations, 2011	192
6.13.6.7	Food Safety Standards Amendment Regulations, 2012	192
6.13.6.7.1	Australia	192
6.13.6.7.2	New Zealand	193
6.13.6.8	South America	193
6.13.7	REGULATORY FRAMEWORK FOR FOOD ALLERGEN TESTING	194
6.13.7.1	International bodies for food safety standards and regulations	194
6.13.7.2	Codex Alimentarius Commission (CAC)	194
6.13.7.3	Global Food Safety Initiative (GFSI)	194
6.13.7.4	North America	195
6.13.7.4.1	US Food and Drug Administration (FDA)	195
6.13.7.4.2	Canada	196
6.13.7.4.3	Mexico	196
6.13.7.5	Europe	197
6.13.7.5.1	Germany	198
6.13.7.5.2	UK	198
6.13.7.6	Asia Pacific	199
6.13.7.6.1	China	199
6.13.7.6.2	India	199
6.13.7.6.3	Australia and New Zealand	200
6.13.7.7	Japan	201
6.13.7.8	RoW	201
6.13.7.8.1	Brazil	201
7	FOOD SAFETY TESTING MARKET	203
7.1	MARKET DEFINITION	203
7.2	MARKET ANALYSIS	203
7.2.1	FOOD SAFETY TESTING MARKET, REGIONAL ANALYSIS	203
FIGURE 37	EUROPE HELD LARGEST SHARE OF FOOD SAFETY TESTING MARKET IN 2022	205
TABLE 42	FOOD SAFETY TESTING MARKET, BY REGION, 2018-2022 (USD MILLION)	205
TABLE 43	FOOD SAFETY TESTING MARKET, BY REGION, 2023-2028 (USD MILLION)	206
7.2.2	FOOD SAFETY TESTING MARKET, BY TARGET TESTED	206
FIGURE 38	FOOD SAFETY TESTING MARKET, BY TARGET TESTED, 2023 VS. 2028 (USD MILLION)	207
TABLE 44	FOOD SAFETY TESTING MARKET, BY TARGET TESTED, 2018-2022 (USD MILLION)	207
TABLE 45	FOOD SAFETY TESTING MARKET, BY TARGET TESTED, 2023-2028 (USD MILLION)	208
7.2.3	FOOD SAFETY TESTING MARKET, BY TECHNOLOGY	208
FIGURE 39	FOOD SAFETY TESTING MARKET, BY TECHNOLOGY, 2023 VS. 2028 (USD MILLION)	209
TABLE 46	FOOD SAFETY TESTING MARKET, BY TECHNOLOGY, 2018-2022 (USD MILLION)	209
TABLE 47	FOOD SAFETY TESTING MARKET, BY TECHNOLOGY, 2023-2028 (USD MILLION)	209
TABLE 48	FOOD SAFETY TESTING MARKET, BY RAPID TECHNOLOGY, 2018-2022 (USD MILLION)	210
TABLE 49	FOOD SAFETY TESTING MARKET, BY RAPID TECHNOLOGY, 2023-2028 (USD MILLION)	210
7.2.4	FOOD SAFETY TESTING MARKET, BY FOOD TESTED	210
TABLE 50	FOODBORNE PATHOGENS BY SOURCE	211
FIGURE 40	FOODS THAT CAUSED OUTBREAK-ASSOCIATED ILLNESSES IN US, 2009-2018	212
FIGURE 41	NUMBER OF OUTBREAKS AND HUMAN CASES IN EU, BY FOOD PRODUCT, 2019	212
TABLE 51	FOOD RECALLS IN US, 2021-2022	213
FIGURE 42	FOOD RECALLS IN US, BY CONTAMINANT CATEGORY, 2021	215

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

FIGURE 43	FOOD SAFETY TESTING MARKET, BY FOOD TESTED, 2023 VS. 2028 (USD MILLION)	215
TABLE 52	FOOD SAFETY TESTING MARKET, BY FOOD TESTED, 2018-2022 (USD MILLION)	216
TABLE 53	FOOD SAFETY TESTING MARKET, BY FOOD TESTED, 2023-2028 (USD MILLION)	216
7.3	COMPETITIVE LANDSCAPE	216
7.3.1	OVERVIEW	216
7.3.2	KEY STRATEGIES ADOPTED BY MAJOR PLAYERS	217
TABLE 54	OVERVIEW OF KEY STRATEGIES ADOPTED BY MAJOR PLAYERS	217
7.3.3	MARKET SHARE ANALYSIS, 2022	218
TABLE 55	FOOD SAFETY TESTING MARKET SHARE ANALYSIS, 2022	219
7.3.4	SEGMENTAL REVENUE ANALYSIS OF FIVE KEY PLAYERS, 2018-2022	219
FIGURE 44	SEGMENTAL REVENUE ANALYSIS OF FIVE KEY MARKET PLAYERS, 2018-2022 (USD BILLION)	219
7.3.5	COMPANY EVALUATION MATRIX, 2022	220
7.3.5.1	Stars	220
7.3.5.2	Emerging leaders	220
7.3.5.3	Pervasive players	220
7.3.5.4	Participants	220
FIGURE 45	FOOD SAFETY TESTING MARKET: COMPANY EVALUATION MATRIX, 2022	221
7.3.6	COMPANY FOOTPRINT	222
TABLE 56	TARGET TESTED: COMPANY FOOTPRINT	222
TABLE 57	TECHNOLOGY: COMPANY FOOTPRINT	223
TABLE 58	REGION: COMPANY FOOTPRINT	223
TABLE 59	OVERALL COMPANY FOOTPRINT	224
7.3.7	STARTUPS/SMALL AND MEDIUM-SIZED ENTERPRISES (SMES) EVALUATION MATRIX, 2022	225
7.3.7.1	Progressive companies	225
7.3.7.2	Starting blocks	225
7.3.7.3	Responsive companies	225
7.3.7.4	Dynamic companies	225
FIGURE 46	FOOD SAFETY TESTING MARKET: STARTUPS/SMES COMPANY EVALUATION MATRIX, 2022	226
7.3.8	COMPETITIVE BENCHMARKING	227
TABLE 60	FOOD SAFETY TESTING MARKET: LIST OF KEY STARTUPS/SMES	227
TABLE 61	FOOD SAFETY TESTING MARKET: COMPETITIVE BENCHMARKING OF KEY STARTUPS/SMES	228
7.3.9	COMPETITIVE SCENARIOS AND TRENDS	229
7.3.9.1	Product/Service launches	229
TABLE 62	FOOD SAFETY TESTING MARKET: PRODUCT/SERVICE LAUNCHES, 2019-2023	229
7.3.9.2	Deals	232
TABLE 63	FOOD SAFETY TESTING MARKET: DEALS, 2019-2023	232
7.3.9.3	Others	241
TABLE 64	FOOD SAFETY TESTING MARKET: OTHERS, 2019-2023	241
8	GMO FOOD SAFETY TESTING MARKET	245
8.1	MARKET DEFINITION	245
8.2	MARKET ANALYSIS	245
8.2.1	GMO FOOD SAFETY TESTING MARKET, REGIONAL ANALYSIS	245
8.2.2	GLOBAL ADOPTION OF GM CROPS	246
FIGURE 47	GLOBAL ADOPTION OF GM CROPS, 2019	246
FIGURE 48	EUROPE HELD LARGEST SHARE OF GMO FOOD SAFETY TESTING MARKET IN 2022	247
TABLE 65	GMO FOOD SAFETY TESTING MARKET, BY REGION, 2018-2022 (USD MILLION)	247
TABLE 66	GMO FOOD SAFETY TESTING MARKET, BY REGION, 2023-2028 (USD MILLION)	248

8.2.3	GMO FOOD SAFETY TESTING MARKET ANALYSIS, BY TRAIT	248
FIGURE 49	GMO FOOD SAFETY TESTING MARKET, BY TRAIT, 2023 VS. 2028 (USD MILLION)	248
TABLE 67	GMO FOOD SAFETY TESTING MARKET, BY TRAIT, 2018-2022 (USD MILLION)	249
TABLE 68	GMO FOOD SAFETY TESTING MARKET, BY TRAIT, 2023-2028 (USD MILLION)	249
8.2.4	GMO FOOD SAFETY TESTING MARKET ANALYSIS, BY TECHNOLOGY	249
FIGURE 50	GMO FOOD SAFETY TESTING MARKET, BY TECHNOLOGY, 2023 VS. 2028 (USD MILLION)	250
TABLE 69	GMO FOOD SAFETY TESTING MARKET, BY TECHNOLOGY, 2018-2022 (USD MILLION)	250
TABLE 70	GMO FOOD SAFETY TESTING MARKET, BY TECHNOLOGY, 2023-2028 (USD MILLION)	250
8.2.5	GMO FOOD SAFETY TESTING MARKET ANALYSIS, BY FOOD TESTED	251
FIGURE 51	GMO FOOD TESTING MARKET, BY FOOD TESTED, 2023 VS. 2028 (USD MILLION)	251
TABLE 71	GMO FOOD SAFETY TESTING MARKET, BY FOOD TESTED, 2018-2022 (USD MILLION)	252
TABLE 72	GMO FOOD SAFETY TESTING MARKET, BY FOOD TESTED, 2023-2028 (USD MILLION)	252
8.3	COMPETITIVE LANDSCAPE	253
8.3.1	OVERVIEW	253
8.3.2	GMO FOOD SAFETY TESTING MARKET SHARE AND RANKING ANALYSIS OF FIVE KEY PLAYERS, 2022	254
FIGURE 52	GMO FOOD SAFETY TESTING MARKET SHARE AND RANKING ANALYSIS OF FIVE KEY PLAYERS, 2022	254
8.3.3	COMPETITIVE SCENARIOS AND TRENDS	254
8.3.3.1	Product/Service launches	254
TABLE 73	GMO FOOD SAFETY TESTING MARKET: PRODUCT/SERVICE LAUNCHES, 2019-2023	254
8.3.3.2	Deals	255
TABLE 74	GMO FOOD SAFETY MARKET: DEALS, 2019-2023	255
8.3.3.3	Others	262
TABLE 75	GMO FOOD SAFETY MARKET: OTHERS, 2019-2023	262
9	FOOD AUTHENTICITY TESTING MARKET	265
9.1	MARKET DEFINITION	265
9.2	MARKET ANALYSIS	265
9.2.1	FOOD AUTHENTICITY TESTING MARKET, REGIONAL ANALYSIS	265
FIGURE 53	EUROPE HELD LARGEST SHARE OF FOOD AUTHENTICITY TESTING MARKET IN 2022	266
TABLE 76	FOOD AUTHENTICITY TESTING MARKET, BY REGION, 2018-2022 (USD MILLION)	266
TABLE 77	FOOD AUTHENTICITY TESTING MARKET, BY REGION, 2023-2028 (USD MILLION)	267
9.2.2	FOOD AUTHENTICITY TESTING MARKET, BY TARGET TESTED	267
FIGURE 54	FOOD AUTHENTICITY MARKET, BY TARGET TESTED, 2023 VS. 2028 (USD MILLION)	268
TABLE 78	FOOD AUTHENTICITY TESTING MARKET, BY TARGET TESTED, 2018-2022 (USD MILLION)	268
TABLE 79	FOOD AUTHENTICITY TESTING MARKET, BY TARGET TESTED, 2023-2028 (USD MILLION)	268
9.2.3	FOOD AUTHENTICITY TESTING MARKET, BY FOOD TESTED	269
FIGURE 55	FOOD AUTHENTICITY MARKET, BY FOOD TESTED, 2023 VS. 2028 (USD MILLION)	269
TABLE 80	FOOD AUTHENTICITY TESTING MARKET, BY FOOD TESTED, 2018-2022 (USD MILLION)	269
TABLE 81	FOOD AUTHENTICITY TESTING MARKET, BY FOOD TESTED, 2023-2028 (USD MILLION)	270
9.2.4	FOOD AUTHENTICITY TESTING MARKET, BY TECHNOLOGY	270
FIGURE 56	FOOD AUTHENTICITY MARKET, BY TECHNOLOGY, 2023 VS. 2028 (USD MILLION)	271
TABLE 82	FOOD AUTHENTICITY TESTING MARKET, BY TECHNOLOGY, 2018-2022 (USD MILLION)	271
TABLE 83	FOOD AUTHENTICITY TESTING MARKET, BY TECHNOLOGY, 2023-2028 (USD MILLION)	271
9.3	COMPETITIVE LANDSCAPE	272
9.3.1	OVERVIEW	272
9.3.2	FOOD AUTHENTICITY TESTING MARKET SHARE AND RANKING ANALYSIS OF FIVE KEY PLAYERS, 2022	273
FIGURE 57	FOOD AUTHENTICITY TESTING MARKET SHARE AND RANKING ANALYSIS OF FIVE KEY PLAYERS, 2022	273
9.3.3	COMPETITIVE SCENARIOS AND TRENDS	273

### 9.3.3.1 Product/Service launches 273

TABLE 84 FOOD AUTHENTICITY TESTING MARKET: PRODUCT/SERVICE LAUNCHES, 2019-2023 273

### 9.3.3.2 Deals 275

TABLE 85 FOOD AUTHENTICITY TESTING MARKET: DEALS, 2019-2023 275

### 9.3.3.3 Others 278

TABLE 86 FOOD AUTHENTICITY TESTING MARKET: OTHERS, 2019-2023 278

## 10 FOOD PATHOGEN TESTING MARKET 280

### 10.1 MARKET DEFINITION 280

### 10.2 MARKET ANALYSIS 280

#### 10.2.1 FOOD PATHOGEN TESTING MARKET, REGIONAL ANALYSIS 280

FIGURE 58 ASIA PACIFIC TO REGISTER HIGHEST CAGR IN FOOD PATHOGEN TESTING MARKET FROM 2023 TO 2028 281

TABLE 87 FOOD PATHOGEN TESTING MARKET, BY REGION, 2018-2022 (USD MILLION) 282

TABLE 88 FOOD PATHOGEN TESTING MARKET, BY REGION, 2023-2028 (USD MILLION) 282

#### 10.2.2 FOOD PATHOGEN TESTING MARKET, BY PATHOGEN TYPE 282

TABLE 89 PATHOGENESIS OF COMMON PATHOGENS 283

FIGURE 59 FOOD PATHOGEN TESTING MARKET, BY TYPE, 2023 VS. 2028 (USD MILLION) 284

TABLE 90 FOOD PATHOGEN TESTING MARKET, BY TYPE, 2018-2022 (USD MILLION) 284

TABLE 91 FOOD PATHOGEN TESTING MARKET, BY TYPE, 2023-2028 (USD MILLION) 284

#### 10.2.3 FOOD PATHOGEN TESTING MARKET, BY FOOD TESTED 285

TABLE 92 FOODBORNE PATHOGENS, BY FOOD SOURCE 285

FIGURE 60 FOOD RECALLS IN US, BY CONTAMINANT CATEGORY, 2021 286

FIGURE 61 FOOD PATHOGEN TESTING MARKET, BY FOOD TESTED, 2023 VS. 2028 (USD MILLION) 286

TABLE 93 FOOD PATHOGEN TESTING MARKET, BY FOOD TESTED, 2018-2022 (USD MILLION) 287

TABLE 94 FOOD PATHOGEN TESTING MARKET, BY FOOD TESTED, 2023-2028 (USD MILLION) 287

#### 10.2.4 FOOD PATHOGEN TESTING MARKET, BY TECHNOLOGY 287

FIGURE 62 FOOD PATHOGEN TESTING MARKET, BY TECHNOLOGY, 2023 VS. 2028 (USD MILLION) 288

TABLE 95 FOOD PATHOGEN TESTING MARKET, BY TECHNOLOGY, 2018-2022 (USD MILLION) 288

TABLE 96 FOOD PATHOGEN TESTING MARKET, BY TECHNOLOGY, 2023-2028 (USD MILLION) 288

### 10.3 COMPETITIVE LANDSCAPE 289

#### 10.3.1 OVERVIEW 289

#### 10.3.2 MARKET SHARE ANALYSIS, 2022 289

TABLE 97 FOOD PATHOGEN TESTING MARKET SHARE ANALYSIS, 2022 290

#### 10.3.3 SEGMENTAL REVENUE ANALYSIS OF FIVE KEY PLAYERS, 2018-2022 290

FIGURE 63 SEGMENTAL REVENUE ANALYSIS OF FIVE KEY PLAYERS, 2018-2022 (USD BILLION) 290

#### 10.3.4 ANNUAL REVENUE VS. GROWTH OF KEY PLAYERS 291

FIGURE 64 ANNUAL REVENUE, 2022 (USD BILLION) VS. REVENUE GROWTH, 2020-2022 (%) 291

#### 10.3.5 KEY PLAYERS IN EBITDA 292

FIGURE 65 KEY PLAYERS IN EBITDA, 2022 (USD BILLION) 292

#### 10.3.6 KEY STRATEGIES ADOPTED BY MAJOR PLAYERS 292

TABLE 98 OVERVIEW OF KEY STRATEGIES ADOPTED BY MAJOR PLAYERS 292

#### 10.3.7 GLOBAL SNAPSHOT OF KEY MARKET PARTICIPANTS 294

FIGURE 66 FOOD PATHOGEN TESTING MARKET: GLOBAL SNAPSHOT OF KEY PARTICIPANTS, 2022 294

#### 10.3.8 COMPANY EVALUATION MATRIX, 2022 294

##### 10.3.8.1 Stars 295

##### 10.3.8.2 Emerging leaders 295

##### 10.3.8.3 Pervasive players 295

##### 10.3.8.4 Participants 295

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

FIGURE 67	FOOD PATHOGEN TESTING MARKET: COMPANY EVALUATION MATRIX, 2022	296
10.3.9	COMPANY FOOTPRINT	297
TABLE 99	TYPE: COMPANY FOOTPRINT	297
TABLE 100	REGION: COMPANY FOOTPRINT	298
TABLE 101	OVERALL COMPANY FOOTPRINT	299
10.3.10	STARTUPS/SMES COMPANY EVALUATION MATRIX, 2022	300
10.3.10.1	Progressive companies	300
10.3.10.2	Starting blocks	300
10.3.10.3	Responsive companies	300
10.3.10.4	Dynamic companies	300
FIGURE 68	FOOD PATHOGEN TESTING MARKET: STARTUPS/SMES COMPANY EVALUATION MATRIX, 2022	301
10.3.11	COMPETITIVE BENCHMARKING	302
TABLE 102	FOOD PATHOGEN TESTING MARKET: LIST OF KEY STARTUPS/SMES	302
10.3.12	COMPETITIVE SCENARIOS AND TRENDS	303
10.3.12.1	Product/Service launches	303
TABLE 103	FOOD PATHOGEN TESTING MARKET: PRODUCT/SERVICE LAUNCHES, 2023-2019	303
10.3.12.2	Deals	304
TABLE 104	FOOD PATHOGEN TESTING MARKET: DEALS, 2018-2022	304
10.3.12.3	Others	307
TABLE 105	FOOD SAFETY TESTING MARKET: OTHERS, 2018-2022	307
11	MYCOTOXIN TESTING MARKET	310
11.1	MARKET DEFINITION	310
11.2	MARKET ANALYSIS	311
11.2.1	MYCOTOXIN TESTING MARKET, REGIONAL ANALYSIS	311
FIGURE 69	EUROPE HELD LARGEST SHARE OF MYCOTOXIN TESTING MARKET IN 2022	312
TABLE 106	MYCOTOXIN FOOD TESTING MARKET, BY REGION, 2018-2022 (USD MILLION)	312
TABLE 107	MYCOTOXIN TESTING MARKET, BY REGION, 2023-2028 (USD MILLION)	313
11.2.2	MYCOTOXIN TESTING MARKET, BY TYPE	313
TABLE 108	MYCOTOXINS: OCCURRENCE, SOURCE, AND HEALTH EFFECTS	314
FIGURE 70	MYCOTOXIN TESTING MARKET, BY TYPE, 2023 VS. 2028 (USD MILLION)	315
TABLE 109	MYCOTOXIN TESTING MARKET, BY TYPE, 2018-2022 (USD MILLION)	315
TABLE 110	MYCOTOXIN TESTING MARKET, BY TYPE, 2023-2028 (USD MILLION)	316
11.2.3	MYCOTOXIN TESTING MARKET, BY FOOD TESTED	316
FIGURE 71	MYCOTOXIN TESTING MARKET, BY FOOD TESTED, 2023 VS. 2028 (USD MILLION)	317
TABLE 111	MYCOTOXIN TESTING MARKET, BY FOOD TESTED, 2018-2022 (USD MILLION)	318
TABLE 112	MYCOTOXIN TESTING MARKET, BY FOOD TESTED, 2023-2028 (USD MILLION)	318
11.2.4	MYCOTOXIN TESTING MARKET, BY TECHNOLOGY	318
FIGURE 72	MYCOTOXIN TESTING MARKET, BY TECHNOLOGY, 2023 VS. 2028 (USD MILLION)	320
TABLE 113	MYCOTOXIN TESTING MARKET, BY TECHNOLOGY, 2018-2022 (USD MILLION)	320
TABLE 114	MYCOTOXIN TESTING MARKET, BY TECHNOLOGY, 2023-2028 (USD MILLION)	320
11.3	COMPETITIVE LANDSCAPE	321
11.3.1	OVERVIEW	321
11.3.2	MYCOTOXIN TESTING MARKET SHARE AND RANKING ANALYSIS OF FIVE KEY PLAYERS, 2022	322
FIGURE 73	MYCOTOXIN TESTING MARKET SHARE AND RANKING ANALYSIS OF FIVE KEY PLAYERS, 2022	322
11.3.3	COMPETITIVE SCENARIOS AND TRENDS	322
11.3.3.1	Product/Service launches	322
TABLE 115	MYCOTOXIN TESTING MARKET: PRODUCT/SERVICE LAUNCHES, 2019-2023	322

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

11.3.3.2	Deals	324
TABLE 116 MYCOTOXIN TESTING MARKET: DEALS, 2019-2023 324		
11.3.3.3	Others	330
TABLE 117 MYCOTOXIN TESTING MARKET: OTHERS, 2019-2023 330		
12	ALLERGEN TESTING MARKET	333
12.1	MARKET DEFINITION	333
12.2	MARKET ANALYSIS	334
12.2.1	FOOD ALLERGEN TESTING MARKET, REGIONAL ANALYSIS	334
FIGURE 74 EUROPE HELD LARGEST SHARE OF FOOD ALLERGEN TESTING MARKET IN 2022 335		
TABLE 118 FOOD ALLERGEN TESTING MARKET, BY REGION, 2018-2022 (USD MILLION) 335		
TABLE 119 FOOD ALLERGEN TESTING MARKET, BY REGION, 2023-2028 (USD MILLION) 336		
12.2.2	FOOD ALLERGEN MARKET, BY SOURCE	336
FIGURE 75 FOOD ALLERGEN TESTING MARKET, BY SOURCE, 2023 VS. 2028 (USD MILLION) 337		
TABLE 120 FOOD ALLERGEN TESTING MARKET, BY SOURCE, 2018-2022 (USD MILLION) 337		
TABLE 121 FOOD ALLERGEN TESTING MARKET, BY SOURCE, 2023-2028 (USD MILLION) 338		
12.2.3	FOOD ALLERGEN MARKET, BY TECHNOLOGY	338
FIGURE 76 FOOD ALLERGEN TESTING MARKET, BY TECHNOLOGY, 2023 VS. 2028 (USD MILLION) 339		
TABLE 122 FOOD ALLERGEN TESTING MARKET, BY TECHNOLOGY, 2018-2022 (USD MILLION) 339		
TABLE 123 FOOD ALLERGEN TESTING MARKET, BY TECHNOLOGY, 2023-2028 (USD MILLION) 339		
12.2.4	FOOD ALLERGEN TESTING MARKET, BY FOOD TESTED	340
FIGURE 77 FOOD ALLERGEN TESTING MARKET, BY FOOD TESTED, 2023 VS. 2028 (USD MILLION) 340		
TABLE 124 FOOD ALLERGEN TESTING MARKET, BY FOOD TESTED, 2018-2022 (USD MILLION) 340		
TABLE 125 FOOD ALLERGEN TESTING MARKET, BY FOOD TESTED, 2023-2028 (USD MILLION) 341		
12.3	COMPETITIVE LANDSCAPE	341
12.3.1	OVERVIEW	341
12.3.2	FOOD ALLERGEN TESTING MARKET SHARE AND RANKING ANALYSIS OF FIVE KEY PLAYERS, 2022	342
FIGURE 78 FOOD ALLERGEN TESTING MARKET SHARE AND RANKING ANALYSIS OF FIVE KEY PLAYERS, 2022 342		
12.3.3	COMPETITIVE SCENARIOS AND TRENDS	342
12.3.3.1	Product/Service launches	342
TABLE 126 FOOD ALLERGEN TESTING MARKET: PRODUCT/SERVICE LAUNCHES, 2019-2023 342		
12.3.3.2	Deals	343
TABLE 127 FOOD ALLERGEN TESTING MARKET: DEALS, 2019-2023 343		
12.3.3.3	Others	350
TABLE 128 FOOD ALLERGEN TESTING MARKET: OTHERS, 2019-2023 350		
13	MEAT SPECIATION TESTING MARKET	353
13.1	MARKET DEFINITION	353
13.2	MARKET ANALYSIS	354
13.2.1	MEAT SPECIATION TESTING MARKET, REGIONAL ANALYSIS	354
FIGURE 79 EUROPE ACCOUNTED FOR LARGEST SHARE OF MEAT SPECIATION TESTING MARKET IN 2022 355		
TABLE 129 MEAT SPECIATION TESTING MARKET, BY REGION, 2018-2022 (USD MILLION) 355		
TABLE 130 MEAT SPECIATION TESTING MARKET, BY REGION, 2023-2028 (USD MILLION) 356		
13.2.2	MEAT SPECIATION MARKET, BY SPECIES	356
FIGURE 80 MEAT SPECIATION TESTING MARKET, BY SPECIES, 2023 VS. 2028 (USD MILLION) 357		
TABLE 131 MEAT SPECIATION TESTING MARKET, BY SPECIES, 2018-2022 (USD MILLION) 357		
TABLE 132 MEAT SPECIATION TESTING MARKET, BY SPECIES, 2023-2028 (USD MILLION) 358		
13.2.3	MEAT SPECIATION MARKET, BY TECHNOLOGY	358
FIGURE 81 MEAT SPECIATION TESTING MARKET, BY TECHNOLOGY, 2023 VS. 2028 (USD MILLION) 359		

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

TABLE 133	MEAT SPECIATION TESTING MARKET, BY TECHNOLOGY, 2018-2022 (USD MILLION)	359
TABLE 134	MEAT SPECIATION TESTING MARKET, BY TECHNOLOGY, 2023-2028 (USD MILLION)	359
13.2.4	MEAT SPECIATION MARKET, BY FORM	360
FIGURE 82	MEAT SPECIATION TESTING MARKET, BY FORM, 2023 VS. 2028 (USD MILLION)	360
TABLE 135	MEAT SPECIATION TESTING MARKET, BY FORM, 2018-2022 (USD MILLION)	360
TABLE 136	MEAT SPECIATION TESTING MARKET, BY FORM, 2023-2028 (USD MILLION)	361
13.3	COMPETITIVE LANDSCAPE	361
13.3.1	OVERVIEW	361
13.3.2	MEAT SPECIATION TESTING MARKET SHARE AND RANKING ANALYSIS OF FIVE KEY PLAYERS, 2022	362
FIGURE 83	MEAT SPECIATION TESTING MARKET SHARE AND RANKING ANALYSIS OF FIVE KEY PLAYERS, 2022	362
13.3.3	COMPETITIVE SCENARIOS AND TRENDS	362
13.3.3.1	Product/Service launches	362
TABLE 137	MEAT SPECIATION TESTING MARKET: PRODUCT/SERVICE LAUNCHES, 2019-2023	362
13.3.3.2	Deals	364
TABLE 138	MEAT SPECIATION TESTING MARKET: DEALS, 2019-2023	364
13.3.3.3	Others	367
TABLE 139	MEAT SPECIATION TESTING MARKET: OTHERS, 2019-2023	367
14	PESTICIDE RESIDUE TESTING MARKET	369
14.1	MARKET DEFINITION	369
14.2	MARKET ANALYSIS	370
14.2.1	PESTICIDE RESIDUE TESTING MARKET, REGIONAL ANALYSIS	370
FIGURE 84	EUROPE ACCOUNTED FOR LARGEST SHARE OF PESTICIDE RESIDUE TESTING MARKET IN 2022	371
TABLE 140	PESTICIDE RESIDUE TESTING MARKET, BY REGION, 2018-2022 (USD MILLION)	371
TABLE 141	PESTICIDE RESIDUE TESTING MARKET, BY REGION, 2023-2028 (USD MILLION)	372
14.2.2	PESTICIDE RESIDUE TESTING MARKET, BY TYPE	372
FIGURE 85	PESTICIDE RESIDUE TESTING MARKET, BY TYPE, 2023 VS. 2028 (USD MILLION)	373
TABLE 142	PESTICIDE RESIDUE TESTING MARKET, BY TYPE, 2018-2022 (USD MILLION)	373
TABLE 143	PESTICIDE RESIDUE TESTING MARKET, BY TYPE, 2023-2028 (USD MILLION)	373
14.2.3	PESTICIDE RESIDUE TESTING MARKET, BY TECHNOLOGY	374
FIGURE 86	PESTICIDE RESIDUE TESTING MARKET, BY TECHNOLOGY, 2023 VS. 2028 (USD MILLION)	374
TABLE 144	PESTICIDE RESIDUE TESTING MARKET, BY TECHNOLOGY, 2018-2022 (USD MILLION)	374
TABLE 145	PESTICIDE RESIDUE TESTING MARKET, BY TECHNOLOGY, 2023-2028 (USD MILLION)	374
14.2.4	PESTICIDE RESIDUE MARKET, BY FOOD TESTED	375
FIGURE 87	PESTICIDE RESIDUE TESTING MARKET, BY FOOD TESTED, 2023 VS. 2028 (USD MILLION)	375
TABLE 146	PESTICIDE RESIDUE TESTING MARKET, BY FOOD TESTED, 2018-2022 (USD MILLION)	376
TABLE 147	PESTICIDE RESIDUE TESTING MARKET, BY FOOD TESTED, 2023-2028 (USD MILLION)	376
14.3	COMPETITIVE LANDSCAPE	376
14.3.1	OVERVIEW	376
14.3.2	PESTICIDE RESIDUE TESTING MARKET SHARE AND RANKING ANALYSIS OF FIVE KEY PLAYERS, 2022	377
FIGURE 88	PESTICIDE RESIDUE TESTING MARKET SHARE AND RANKING ANALYSIS OF FIVE KEY PLAYERS, 2022	377
14.3.3	COMPETITIVE SCENARIOS AND TRENDS	378
14.3.3.1	Product/Service launches	378
TABLE 148	PESTICIDE RESIDUE TESTING MARKET: PRODUCT/SERVICE LAUNCHES, 2019-2023	378
14.3.3.2	Deals	379
TABLE 149	PESTICIDE RESIDUE TESTING MARKET: DEALS, 2019-2023	379
14.3.3.3	Others	386
TABLE 150	PESTICIDE RESIDUE TESTING MARKET: OTHERS, 2019-2023	386

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)



**Top 10 Food Safety Testing and Technologies Trends Market (Food Safety, GM Food Safety, Food Pathogen, Meat Speciation, Food Authenticity, Pesticide Residue, Mycotoxin, Allergen, Water, and Bottled Water) - Global Forecast to 2028**

Market Report | 2023-10-27 | 497 pages | MarketsandMarkets

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

**ORDER FORM:**

Select license	License	Price
	Single User	\$4950.00
	Multi User	\$6650.00
	Corporate License	\$8150.00
	Enterprise Site License	\$10000.00
		VAT
		Total

\*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

\*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Date

2025-05-20

Signature



**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)