

Calibration Services Market by Proofreading (In-house, OEM, Third-party Vendor), Application (Mechanical, Electrical, Dimensional, Thermodynamics), Application (Industrial & Automation, Electronics, Aerospace & Defence) and Region - Forecast to 2030

Market Report | 2023-08-11 | 251 pages | MarketsandMarkets

AVAILABLE LICENSES:

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

Report description:

The global calibration services market is projected to grow from USD 5.7 billion in 2023 to USD 8.1 billion by 2030, registering a CAGR of 5.3% during the forecast period. The market's growth is primarily propelled by the escalating demand for dimensional, electrical, mechanical, among other calibration services. Calibration services encompass a range of types, including dimensional calibration for measurements like length and width, electrical calibration for voltage and current instruments, temperature calibration for thermometers, pressure calibration for gauges, flow calibration for flow meters, mass calibration for scales, force calibration for load cells, time and frequency calibration for clocks and counters, torque calibration for wrenches, humidity calibration for hygrometers, optical calibration for spectrometers, acoustic calibration for microphones, ensuring accurate measurements and instrument reliability across diverse industries and applications. Furthermore, the expanding adoption of calibration services in various applications, such as electronics, industrial and automation, aerospace and defense and communication, further fuels the market's growth trajectory.

The third-party vendor proofreading segment is expected to hold a significant market share in the overall calibration services market

During the forecast period, third-party vendor proofreading segment in the calibration market is likely to experience notable growth driven by various factors. Companies across industries increasingly recognize the critical role of accurate calibration in maintaining compliance, quality, and operational efficiency. As the complexity of instruments and equipment rises, the need for specialized expertise in proofreading calibration procedures becomes evident. Third-party vendors offer impartial and specialized

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

services, addressing potential errors or inconsistencies that might otherwise be overlooked. This outsourcing trend allows businesses to focus on their core operations while ensuring precision in calibration processes. As regulatory demands and technological advancements persist, the third-party vendor proofreading segment is poised for continued growth, contributing to the overall expansion of the calibration services market.

The electronics application is expected to grow at a significant growth rate during the forecast period

The calibration services within the electronic manufacturing industry include the calibration of final products, periodic calibration of infrastructural machinery, and calibration on completion of specified operational usage time. Considering its vast nature of operations, calibration services are likely to have a considerable demand in the electronic manufacturing industry. Calibration services are frequently used in all electronic manufacturing plants to monitor the regular activities and regulate the equipment according to standard values. With the growing trend of using inspection services such as industrial radiography, phased array ultrasonic, and X-ray computed tomography in electronic manufacturing plants, the calibration of such test and measurement devices has also become a vital aspect of preventive maintenance within the industry. Calibration services are essential in consumer electronics to ensure accurate and reliable functionality of devices, maintain product quality and compliance with industry standards, and verify production processes. They play a critical role in enhancing user experiences and building consumer trust in electronic products.

North America is projected to have the significant growth rate during the forecast period

The North American region has grown substantially in the calibration services market due to its robust industrial landscape and stringent quality standards. Industries spanning aerospace, healthcare, automotive, and manufacturing demand precise measurements to comply with regulations. Technological advancements have led to increasingly complex instruments, necessitating accurate calibration. Moreover, North America's emphasis on innovation and adoption of precision manufacturing practices has propelled the calibration services sector. As businesses strive for accuracy and compliance, the region's advanced infrastructure and commitment to quality control contribute to its significant role in driving the calibration services market's expansion.

Breakdown of profiles of primary participants:

- By Company Type: Tier 1 = 30%, Tier 2 = 50%, and Tier 3 = 20%

- By Designation: C-level Executives = 25%, Directors = 35%, and Others = 40%

- By Region: North America = 35%, Europe = 30%, APAC = 25%, and Rest of the World = 10%

The major companies in the calibration services market are Keysight Technologies (US), Hexagon AB (Sweden), Rohde & Schwarz (Germany), Tektronix, Inc. (US), and VIAVI Solutions Inc. (US).

Research Coverage

The report segments the calibration services market and forecasts its size, by value, based on region (North America, Europe, Asia Pacific, and Rest of the World), proofreading (in-house, OEM, third-party vendor), application (mechanical, electrical, dimensional, thermodynamics), and end user (industrial & automation, electronics, communication, aerospace & defence, others). The report also comprehensively reviews market drivers, restraints, opportunities, and challenges in the calibration services market. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Reasons to Buy the Report:

- Analysis of key drivers (growing demand for quality and inspection equipment in precision manufacturing, increased need for interoperability testing owing to growing deployment of IoT and connected devices, strict regulatory standards imposed by governments to ensure product safety and environmental protection), restraints (lack of highly skilled calibration and maintenance technicians, high competition due to increased price sensitivity), opportunities (the advent of 5G technology and deployment of LTE and LTE-Advanced (4G) networks), and challenges (built-in self-calibration feature of electrical & electronic instrument) influencing the growth of the calibration services market.

- Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the calibration services market

- Market Development: Comprehensive information about lucrative markets - the report analyses the calibration services market across varied regions.

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

-□ Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the calibration services market.

-□ Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like Keysight Technologies (US), Hexagon AB (Sweden), Rohde & Schwarz (Germany), Tektronix, Inc. (US), VIAVI Solutions Inc. (US), Omega Engineering, Inc. (US), Advantest Corporation (Japan), National Instruments Corporation (US), Anritsu (Japan), Trescal, Inc. (France), Pratt and Whitney Measurement Systems, Inc. (US), Kolb & Baumann GmbH & Co KG. (Germany), Renishaw plc. (UK), Feinmess Suhl GmbH (Germany), Octagon Precision India Pvt. Ltd. (India), TESA Brown & Sharpe (Part of Hexagon AB) (Switzerland), Mitutoyo (Japan), MSI Viking (US), Master Gage & Tool Co. (US), Tanson Instrument (India), and Micro Precision Calibration (US).

Table of Contents:

1	INTRODUCTION	42	
1.1	STUDY OBJECTIVES	42	
1.2	MARKET DEFINITION	42	
1.2.1	INCLUSIONS AND EXCLUSIONS	43	
1.2.2	COSMETIC ANTIOXIDANTS: MARKET DEFINITION AND INCLUSIONS, BY SOURCE	43	
1.2.3	COSMETIC ANTIOXIDANTS: MARKET DEFINITION AND INCLUSIONS, BY APPLICATION	43	
1.2.4	COSMETIC ANTIOXIDANTS: MARKET DEFINITION AND INCLUSIONS, BY TYPE	43	
1.2.5	COSMETIC ANTIOXIDANTS: MARKET DEFINITION AND INCLUSIONS, BY FUNCTION	44	
1.3	STUDY SCOPE	44	
	FIGURE 1	COSMETIC ANTIOXIDANTS MARKET SEGMENTATION	44
1.4	REGIONS COVERED	45	
1.5	YEARS CONSIDERED	45	
1.6	CURRENCY CONSIDERED	46	
1.7	UNITS CONSIDERED	46	
1.8	STAKEHOLDERS	46	
1.9	SUMMARY OF CHANGES	46	
1.9.1	RECESSION IMPACT	47	
2	RESEARCH METHODOLOGY	48	
2.1	RESEARCH DATA	48	
	FIGURE 2	COSMETIC ANTIOXIDANTS MARKET: RESEARCH DESIGN	48
2.1.1	SECONDARY DATA	49	
2.1.2	PRIMARY DATA	49	
2.1.2.1	Key primary participants	49	
2.1.2.2	Key industry insights	50	
2.1.2.3	Breakdown of primary interviews	51	
2.2	MARKET SIZE ESTIMATION	51	
2.2.1	BOTTOM-UP APPROACH	51	
	FIGURE 3	MARKET SIZE ESTIMATION - APPROACH 1 (SUPPLY-SIDE): COMBINED MARKET SHARE OF MAJOR PLAYERS	52
	FIGURE 4	MARKET SIZE ESTIMATION - APPROACH 1 BOTTOM-UP (SUPPLY-SIDE): COLLECTIVE REVENUE OF ALL TYPES	52
	FIGURE 5	MARKET SIZE ESTIMATION METHODOLOGY - APPROACH 2 BOTTOM-UP (DEMAND-SIDE): PRODUCTS SOLD AND THEIR AVERAGE SELLING PRICE	53
2.3	DATA TRIANGULATION	53	
	FIGURE 6	COSMETIC ANTIOXIDANTS MARKET: DATA TRIANGULATION	54
2.4	GROWTH FORECAST	54	
2.4.1	SUPPLY SIDE	55	
	FIGURE 7	SUPPLY-SIDE MARKET CAGR PROJECTIONS	55

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

2.4.2	DEMAND SIDE	55
FIGURE 8	DEMAND-SIDE MARKET GROWTH PROJECTIONS	56
2.5	FACTOR ANALYSIS	56
2.6	RECESSION IMPACT ANALYSIS	57
2.7	ASSUMPTIONS	57
2.8	RESEARCH LIMITATIONS	57
2.9	RISKS	58
TABLE 1	COSMETIC ANTIOXIDANTS MARKET: RISK ASSESSMENT	58
3	EXECUTIVE SUMMARY	59
FIGURE 9	ANTI-AGING TO BE LARGEST FUNCTION OF COSMETIC ANTIOXIDANTS MARKET IN 2022	60
FIGURE 10	NATURAL SOURCE TO BE LARGEST SEGMENT DURING FORECAST PERIOD	60
FIGURE 11	VITAMINS SEGMENT TO RECORD HIGHEST GROWTH DURING FORECAST PERIOD	61
FIGURE 12	SKIN CARE TO BE LARGEST APPLICATION OF COSMETIC ANTIOXIDANTS DURING FORECAST PERIOD	61
FIGURE 13	ASIA PACIFIC TO ACCOUNT FOR LARGEST MARKET SHARE DURING FORECAST PERIOD	62
4	PREMIUM INSIGHTS	63
4.1	ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN COSMETIC ANTIOXIDANTS MARKET	63
FIGURE 14	INCREASING APPLICATION AREAS OFFER GROWTH OPPORTUNITIES FOR COSMETIC ANTIOXIDANTS MARKET	63
4.2	COSMETIC ANTIOXIDANTS MARKET, BY REGION	63
FIGURE 15	ASIA PACIFIC TO RECORD HIGHEST CAGR DURING FORECAST PERIOD	63
4.3	ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY AND APPLICATION	64
FIGURE 16	SKIN CARE AND CHINA ACCOUNTED FOR LARGEST MARKET SHARE IN 2022	64
4.4	COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION AND REGION	64
FIGURE 17	ANTI-AGING LED COSMETIC ANTIOXIDANTS MARKET IN MOST REGIONS	64
4.5	COSMETIC ANTIOXIDANTS MARKET, BY KEY COUNTRY	65
FIGURE 18	INDIA TO REGISTER HIGHEST CAGR DURING FORECAST PERIOD	65
5	MARKET OVERVIEW	66
5.1	INTRODUCTION	66
5.2	MARKET DYNAMICS	66
FIGURE 19	DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES	67
5.2.1	DRIVERS	67
5.2.1.1	Increase in aging population	67
TABLE 2	WORLD POPULATION INDEX (MEDIAN AGE), BY COUNTRY, 2022	68
5.2.1.2	Rise in online purchase of cosmetics	69
5.2.1.3	High demand for customized cosmetic products	69
5.2.1.4	Rising disposable income and improving living standards	69
TABLE 3	GROSS ADJUSTED HOUSEHOLD DISPOSABLE PER CAPITA INCOME, 2019 AND 2022 (USD)	70
5.2.2	RESTRAINTS	70
5.2.2.1	Availability of advanced medical treatments in developed countries	70
5.2.2.2	High cost of natural antioxidants	71
5.2.2.3	Safety concerns about chemically derived antioxidants	71
5.2.3	OPPORTUNITIES	71
5.2.3.1	Rising demand for male cosmetics	71
5.2.3.2	Potential use of microbiome in cosmetics	71
5.2.4	CHALLENGES	72
5.2.4.1	Stringent regulations reshaping cosmetic antioxidants market	72
5.2.4.2	Increase in counterfeit cosmetic products	72
5.3	PORTER'S FIVE FORCES ANALYSIS	73

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

FIGURE 20 PORTER'S FIVE FORCES ANALYSIS: COSMETIC ANTIOXIDANTS MARKET 73

5.3.1 THREAT OF NEW ENTRANTS 74

5.3.2 THREAT OF SUBSTITUTES 74

5.3.3 BARGAINING POWER OF SUPPLIERS 74

5.3.4 BARGAINING POWER OF BUYERS 74

5.3.5 INTENSITY OF COMPETITIVE RIVALRY 75

TABLE 4 COSMETIC ANTIOXIDANTS MARKET: PORTER'S FIVE FORCES ANALYSIS 75

5.4 MACROECONOMIC INDICATORS 75

5.4.1 GDP TRENDS AND FORECAST 76

TABLE 5 GDP TRENDS AND FORECAST, BY MAJOR ECONOMIES, 2020-2028 (USD BILLION) 76

6 INDUSTRY TRENDS 77

6.1 SUPPLY CHAIN ANALYSIS 77

FIGURE 21 COSMETIC ANTIOXIDANTS MARKET: SUPPLY CHAIN 77

6.1.1 RAW MATERIAL SUPPLIERS 77

6.1.2 MANUFACTURERS 78

6.1.3 DISTRIBUTORS 78

6.1.4 END USERS 78

6.2 TRENDS AND DISRUPTIONS IMPACTING CUSTOMER BUSINESS 79

6.2.1 REVENUE SHIFT AND NEW REVENUE POCKETS FOR COSMETIC ANTIOXIDANTS MARKET 79

FIGURE 22 COSMETIC ANTIOXIDANTS MARKET: FUTURE REVENUE MIX 79

6.3 ECOSYSTEM MAPPING 80

FIGURE 23 COSMETIC ANTIOXIDANTS MARKET: ECOSYSTEM MAP 80

TABLE 6 COSMETIC ANTIOXIDANTS MARKET: ECOSYSTEM 81

6.4 TECHNOLOGY ANALYSIS 82

6.4.1 TECHNOLOGICAL ADVANCEMENTS IN COSMETIC ANTIOXIDANTS 82

6.5 CASE STUDY ANALYSIS 84

6.5.1 MAJESTEM DRYPURE BY CRODA TO PROVIDE ANTI-AGING BENEFITS 84

6.6 KEY STAKEHOLDERS AND BUYING CRITERIA 84

6.6.1 KEY STAKEHOLDERS IN BUYING PROCESS 84

FIGURE 24 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE APPLICATIONS 84

TABLE 7 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE APPLICATIONS (%) 85

6.6.2 BUYING CRITERIA 85

FIGURE 25 KEY BUYING CRITERIA FOR TOP THREE APPLICATIONS 85

TABLE 8 KEY BUYING CRITERIA FOR TOP THREE APPLICATIONS 85

6.7 PRICING ANALYSIS 86

6.7.1 AVERAGE SELLING PRICE, BY APPLICATION 86

FIGURE 26 AVERAGE SELLING PRICE OF KEY PLAYERS FOR TOP THREE APPLICATIONS 86

TABLE 9 AVERAGE SELLING PRICE BY KEY PLAYERS FOR TOP THREE APPLICATIONS (USD/KG) 86

6.7.2 AVERAGE SELLING PRICE, BY REGION 86

FIGURE 27 AVERAGE SELLING PRICE OF COSMETIC ANTIOXIDANTS, BY REGION, 2021-2028 87

TABLE 10 AVERAGE SELLING PRICE OF COSMETIC ANTIOXIDANTS, BY REGION, 2021-2028 (USD/KG) 87

6.8 TRADE ANALYSIS 87

6.8.1 IMPORT SCENARIO 87

FIGURE 28 COSMETIC ANTIOXIDANTS IMPORT, BY KEY COUNTRY (2013-2022) 88

TABLE 11 IMPORT OF COSMETIC ANTIOXIDANTS, BY REGION, 2017-2021 (USD MILLION) 88

6.8.2 EXPORT SCENARIO 88

FIGURE 29 COSMETIC ANTIOXIDANTS EXPORT, BY KEY COUNTRY (2017-2021) 89

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 12 □ EXPORT OF COSMETIC ANTIOXIDANTS, BY REGION, 2017-2021 (USD MILLION) □89

6.9 □ REGULATORY LANDSCAPE □89

6.9.1 □ REGULATIONS RELATED TO COSMETIC ANTIOXIDANTS □90

6.9.2 □ REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS □91

6.10 □ KEY CONFERENCES AND EVENTS, 2023-2024 □91

TABLE 13 □ COSMETIC ANTIOXIDANTS MARKET: KEY CONFERENCES AND EVENTS □91

6.11 □ PATENT ANALYSIS □92

6.11.1 □ APPROACH □92

6.11.2 □ DOCUMENT TYPES □92

TABLE 14 □ PATENT COUNT □92

FIGURE 30 □ PATENTS REGISTERED IN COSMETIC ANTIOXIDANTS MARKET, 2012-2022 □93

FIGURE 31 □ PATENT PUBLICATION TRENDS, 2012-2022 □93

FIGURE 32 □ LEGAL STATUS OF PATENTS FILED IN COSMETIC ANTIOXIDANTS MARKET □94

6.11.3 □ JURISDICTION ANALYSIS □94

FIGURE 33 □ MAXIMUM PATENTS FILED IN JURISDICTION OF US □94

6.11.4 □ TOP APPLICANTS □94

FIGURE 34 □ L'OREAL GROUP REGISTERED MAXIMUM NUMBER OF PATENTS BETWEEN 2012 AND 2022 □95

TABLE 15 □ PATENTS BY L'OREAL GROUP □95

TABLE 16 □ PATENTS BY PROCTER & GAMBLE □96

TABLE 17 □ TOP 10 PATENT OWNERS IN US, 2012-2022 □97

7 □ COSMETIC ANTIOXIDANTS MARKET, BY SOURCE □98

7.1 □ INTRODUCTION □99

FIGURE 35 □ NATURAL SOURCE TO LEAD COSMETIC ANTIOXIDANTS MARKET DURING FORECAST PERIOD □99

TABLE 18 □ COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2017-2021 (USD MILLION) □99

TABLE 19 □ COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2022-2028 (USD MILLION) □99

TABLE 20 □ COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2017-2021 (TON) □100

TABLE 21 □ COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2022-2028 (TON) □100

7.2 □ NATURAL □100

7.2.1 □ INCREASING AWARENESS ON USE OF GREEN PRODUCTS TO DRIVE MARKET □100

TABLE 22 □ NATURAL: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) □100

TABLE 23 □ NATURAL: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) □101

TABLE 24 □ NATURAL: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) □101

TABLE 25 □ NATURAL: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) □101

7.3 □ CHEMICALLY DERIVED □102

7.3.1 □ COST-EFFECTIVENESS AND EASY AVAILABILITY OF CHEMICAL ANTIOXIDANTS TO DRIVE MARKET □102

TABLE 26 □ CHEMICALLY DERIVED: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) □102

TABLE 27 □ CHEMICALLY DERIVED: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) □102

TABLE 28 □ CHEMICALLY DERIVED: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) □103

TABLE 29 □ CHEMICALLY DERIVED: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) □103

8 □ COSMETIC ANTIOXIDANTS MARKET, BY TYPE □104

8.1 □ INTRODUCTION □105

FIGURE 36 □ VITAMINS TO DOMINATE MARKET DURING FORECAST PERIOD □105

TABLE 30 □ COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2017-2021 (USD MILLION) □105

TABLE 31 □ COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2022-2028 (USD MILLION) □106

TABLE 32 □ COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2017-2021 (TON) □106

TABLE 33 □ COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2022-2028 (TON) □106

8.2 □ VITAMINS □107

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

8.2.1 HEALTH BENEFITS OF VITAMINS TO DRIVE MARKET 107

8.2.2 VITAMIN E 107

8.2.3 VITAMIN C 107

8.2.4 VITAMIN A 107

TABLE 34 VITAMINS: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) 107

TABLE 35 VITAMINS: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) 108

TABLE 36 VITAMINS: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) 108

TABLE 37 VITAMINS: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) 108

8.3 CAROTENOIDS 109

8.3.1 USE OF CAROTENOIDS IN SUNSCREEN LOTIONS AND CONDITIONERS TO FUEL MARKET 109

TABLE 38 CAROTENOIDS: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) 109

TABLE 39 CAROTENOIDS: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) 109

TABLE 40 CAROTENOIDS: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) 110

TABLE 41 CAROTENOIDS: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) 110

8.4 POLYPHENOLS 110

8.4.1 SKIN CALMING PROPERTIES OF POLYPHENOLS TO DRIVE MARKET 110

TABLE 42 POLYPHENOLS: COSMETIC ANTIOXIDANT MARKET, BY REGION, 2017-2021 (USD MILLION) 111

TABLE 43 POLYPHENOLS: COSMETIC ANTIOXIDANT MARKET, BY REGION, 2022-2028 (USD MILLION) 111

TABLE 44 POLYPHENOLS: COSMETIC ANTIOXIDANT MARKET, BY REGION, 2017-2021 (TON) 111

TABLE 45 POLYPHENOLS: COSMETIC ANTIOXIDANT MARKET, BY REGION, 2022-2028 (TON) 112

8.5 ENZYMES 112

8.5.1 DEMAND FOR ANTI-INFLAMMATORY AND ANTI-AGING SKIN CREAMS TO DRIVE MARKET 112

TABLE 46 ENZYMES: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) 112

TABLE 47 ENZYMES: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) 113

TABLE 48 ENZYMES: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) 113

TABLE 49 ENZYMES: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) 113

8.6 OTHER TYPES 114

8.6.1 BUTYLATED HYDROXY ANISOLE 114

8.6.2 BUTYLATED HYDROXYTOLUENE 114

8.6.3 TERT-BUTYLHYDROQUINONE 114

8.6.4 PROPYL GALLATE 114

TABLE 50 OTHER TYPES: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) 114

TABLE 51 OTHER TYPES: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) 115

TABLE 52 OTHER TYPES: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) 115

TABLE 53 OTHER TYPES: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) 115

9 COSMETIC ANTIOXIDANT MARKET, BY FUNCTION 116

9.1 INTRODUCTION 117

FIGURE 37 ANTI-AGING FUNCTION TO DOMINATE COSMETIC ANTIOXIDANTS MARKET DURING FORECAST PERIOD 117

TABLE 54 COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2017-2021 (USD MILLION) 117

TABLE 55 COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2022-2028 (USD MILLION) 118

TABLE 56 COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2017-2021 (TON) 118

TABLE 57 COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2022-2028 (TON) 119

9.2 HAIR CONDITIONING 119

9.2.1 GROWING DEMAND FOR HAIR CONDITIONERS AND SERUMS TO DRIVE MARKET 119

TABLE 58 HAIR CONDITIONING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) 119

TABLE 59 HAIR CONDITIONING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) 120

TABLE 60 HAIR CONDITIONING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) 120

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 61 HAIR CONDITIONING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) 120
9.3 ANTI-AGING 121

9.3.1 PREMATURE SKIN AGING TO FUEL DEMAND FOR ANTIOXIDANTS 121

TABLE 62 ANTI-AGING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) 121

TABLE 63 ANTI-AGING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) 121

TABLE 64 ANTI-AGING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) 122

TABLE 65 ANTI-AGING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) 122

9.4 MOISTURIZING 122

9.4.1 MOISTURIZING PROPERTIES OF VITAMINS TO FUEL DEMAND FOR SKIN AND HAIR CARE PRODUCTS 122

TABLE 66 MOISTURIZING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) 123

TABLE 67 MOISTURIZING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) 123

TABLE 68 MOISTURIZING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) 123

TABLE 69 MOISTURIZING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) 124

9.5 UV PROTECTION 124

9.5.1 DEMAND FOR SUNSCREEN LOTIONS TO FUEL MARKET 124

TABLE 70 UV PROTECTION: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) 124

TABLE 71 UV PROTECTION: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) 125

TABLE 72 UV PROTECTION: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) 125

TABLE 73 UV PROTECTION: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) 125

9.6 ANTI-INFLAMMATORY 126

9.6.1 ANTI-INFLAMMATORY PROPERTIES OF POMEGRANATE EXTRACTS TO BOOST MARKET 126

TABLE 74 ANTI-INFLAMMATORY: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) 126

TABLE 75 ANTI-INFLAMMATORY: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) 126

TABLE 76 ANTI-INFLAMMATORY: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) 127

TABLE 77 ANTI-INFLAMMATORY: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) 127

9.7 HAIR CLEANSING 127

9.7.1 INCREASING ENVIRONMENTAL POLLUTION TO FUEL DEMAND FOR CLEANSERS 127

TABLE 78 HAIR CLEANSING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) 128

TABLE 79 HAIR CLEANSING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) 128

TABLE 80 HAIR CLEANSING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) 128

TABLE 81 HAIR CLEANSING: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) 129

9.8 OTHER FUNCTIONS 129

TABLE 82 OTHER FUNCTIONS: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) 129

TABLE 83 OTHER FUNCTIONS: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) 130

TABLE 84 OTHER FUNCTIONS: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) 130

TABLE 85 OTHER FUNCTIONS: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) 130

10 COSMETIC ANTIOXIDANT MARKET, BY APPLICATION 131

10.1 INTRODUCTION 132

FIGURE 38 SKIN CARE APPLICATION TO DOMINATE MARKET DURING FORECAST PERIOD 132

TABLE 86 COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 132

TABLE 87 COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 132

TABLE 88 COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 133

TABLE 89 COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 133

10.2 SKIN CARE 133

10.2.1 RISING DEMAND FOR GROOMING & COSMETIC PRODUCTS TO DRIVE MARKET 133

TABLE 90 SKIN CARE: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) 134

TABLE 91 SKIN CARE: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) 134

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 92 □ SKIN CARE: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) □ 134

TABLE 93 □ SKIN CARE: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) □ 135

10.3 □ HAIR CARE □ 135

10.3.1 □ HIGH DEMAND FOR GREEN TEA AND VITAMIN SUPPLEMENTS TO FUEL MARKET □ 135

TABLE 94 □ HAIR CARE: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) □ 135

TABLE 95 □ HAIR CARE: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) □ 136

TABLE 96 □ HAIR CARE: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) □ 136

TABLE 97 □ HAIR CARE: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) □ 136

10.4 □ MAKE-UP □ 137

10.4.1 □ INCREASED DEMAND FOR COLOR COSMETICS AND MINERAL POWDERS TO DRIVE MARKET □ 137

TABLE 98 □ MAKE-UP: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) □ 137

TABLE 99 □ MAKE-UP: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) □ 137

TABLE 100 □ MAKE-UP: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) □ 138

TABLE 101 □ MAKE-UP: COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) □ 138

11 □ COSMETIC ANTIOXIDANTS MARKET, BY REGION □ 139

11.1 □ INTRODUCTION □ 140

FIGURE 39 □ ASIA PACIFIC TO BE FASTEST-GROWING COSMETIC ANTIOXIDANTS MARKET DURING FORECAST PERIOD □ 140

TABLE 102 □ COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (USD MILLION) □ 140

TABLE 103 □ COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (USD MILLION) □ 141

TABLE 104 □ COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2017-2021 (TON) □ 141

TABLE 105 □ COSMETIC ANTIOXIDANTS MARKET, BY REGION, 2022-2028 (TON) □ 141

11.2 □ ASIA PACIFIC □ 142

FIGURE 40 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET SNAPSHOT □ 142

11.2.1 □ RECESSION IMPACT ON ASIA PACIFIC □ 143

11.2.2 □ ASIA PACIFIC COSMETIC ANTIOXIDANTS MARKET, BY SOURCE □ 143

TABLE 106 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2017-2021 (USD MILLION) □ 143

TABLE 107 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2022-2028 (USD MILLION) □ 143

TABLE 108 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2017-2021 (TON) □ 144

TABLE 109 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2022-2028 (TON) □ 144

11.2.3 □ ASIA PACIFIC COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION □ 144

TABLE 110 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) □ 144

TABLE 111 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) □ 144

TABLE 112 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) □ 145

TABLE 113 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) □ 145

11.2.4 □ ASIA PACIFIC COSMETIC ANTIOXIDANTS MARKET, BY TYPE □ 145

TABLE 114 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2017-2021 (USD MILLION) □ 145

TABLE 115 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2022-2028 (USD MILLION) □ 145

TABLE 116 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2017-2021 (TON) □ 146

TABLE 117 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2022-2028 (TON) □ 146

11.2.5 □ ASIA PACIFIC COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION □ 146

TABLE 118 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2017-2021 (USD MILLION) □ 146

TABLE 119 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2022-2028 (USD MILLION) □ 147

TABLE 120 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2017-2021 (TON) □ 147

TABLE 121 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2022-2028 (TON) □ 148

11.2.6 □ ASIA PACIFIC COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY □ 148

TABLE 122 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY, 2017-2021 (USD MILLION) □ 148

TABLE 123 □ ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY, 2022-2028 (USD MILLION) □ 148

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 124 ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY, 2017-2021 (TON) 149

TABLE 125 ASIA PACIFIC: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY, 2022-2028 (TON) 149

11.2.6.1 China 149

11.2.6.1.1 Strong economic growth to drive market 149

TABLE 126 CHINA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 150

TABLE 127 CHINA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 150

TABLE 128 CHINA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 150

TABLE 129 CHINA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 151

11.2.6.2 Japan 151

11.2.6.2.1 Strong foothold of leading manufacturers to drive market 151

TABLE 130 JAPAN: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 151

TABLE 131 JAPAN: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 151

TABLE 132 JAPAN: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 152

TABLE 133 JAPAN: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 152

11.2.6.3 India 152

11.2.6.3.1 Rising income levels and minimal regulatory intervention to propel market 152

TABLE 134 INDIA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 153

TABLE 135 INDIA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 153

TABLE 136 INDIA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 153

TABLE 137 INDIA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 154

11.2.6.4 South Korea 154

11.2.6.4.1 Presence of leading functional cosmetics manufacturers to drive market 154

TABLE 138 SOUTH KOREA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 154

TABLE 139 SOUTH KOREA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 155

TABLE 140 SOUTH KOREA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 155

TABLE 141 SOUTH KOREA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 155

11.3 NORTH AMERICA 156

FIGURE 41 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET SNAPSHOT 156

11.3.1 RECESSION IMPACT ON NORTH AMERICA 157

11.3.2 NORTH AMERICA COSMETIC ANTIOXIDANTS MARKET, BY SOURCE 157

TABLE 142 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2017-2021 (USD MILLION) 157

TABLE 143 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2022-2028 (USD MILLION) 157

TABLE 144 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2017-2021 (TON) 158

TABLE 145 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2022-2028 (TON) 158

11.3.3 NORTH AMERICA COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION 158

TABLE 146 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 158

TABLE 147 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 158

TABLE 148 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 159

TABLE 149 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 159

11.3.4 NORTH AMERICA COSMETIC ANTIOXIDANTS MARKET, BY TYPE 159

TABLE 150 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2017-2021 (USD MILLION) 159

TABLE 151 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2022-2028 (USD MILLION) 160

TABLE 152 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2017-2021 (TON) 160

TABLE 153 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2022-2028 (TON) 160

11.3.5 NORTH AMERICA COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION 161

TABLE 154 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2017-2021 (USD MILLION) 161

TABLE 155 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2022-2028 (USD MILLION) 161

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 156 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2017-2021 (TON) 162

TABLE 157 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2022-2028 (TON) 162

11.3.6 NORTH AMERICA COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY 162

TABLE 158 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY, 2017-2021 (USD MILLION) 162

TABLE 159 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY, 2022-2028 (USD MILLION) 163

TABLE 160 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY, 2017-2021 (TON) 163

TABLE 161 NORTH AMERICA: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY, 2022-2028 (TON) 163

11.3.6.1 US 164

11.3.6.1.1 Demand for natural and herbal cosmetic products to drive market 164

TABLE 162 US: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 164

TABLE 163 US: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 164

TABLE 164 US: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 165

TABLE 165 US: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 165

11.3.6.2 Canada 165

11.3.6.2.1 Increasing demand for premium cosmetic products to fuel market 165

TABLE 166 CANADA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 165

TABLE 167 CANADA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 166

TABLE 168 CANADA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 166

TABLE 169 CANADA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 166

11.3.6.3 Mexico 167

11.3.6.3.1 Increased purchasing power to boost market 167

TABLE 170 MEXICO: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 167

TABLE 171 MEXICO: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 167

TABLE 172 MEXICO: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 168

TABLE 173 MEXICO: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 168

11.4 EUROPE 168

FIGURE 42 EUROPE: COSMETIC ANTIOXIDANTS MARKET SNAPSHOT 169

11.4.1 RECESSION IMPACT ON EUROPE 169

11.4.2 EUROPE COSMETIC ANTIOXIDANTS MARKET, BY SOURCE 170

TABLE 174 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2017-2021 (USD MILLION) 170

TABLE 175 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2022-2028 (USD MILLION) 170

TABLE 176 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2017-2021 (TON) 170

TABLE 177 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY SOURCE, 2022-2028 (TON) 170

11.4.3 EUROPE COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION 171

TABLE 178 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 171

TABLE 179 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 171

TABLE 180 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 171

TABLE 181 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 172

11.4.4 EUROPE COSMETIC ANTIOXIDANTS MARKET, BY TYPE 172

TABLE 182 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2017-2021 (USD MILLION) 172

TABLE 183 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2022-2028 (USD MILLION) 172

TABLE 184 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2017-2021 (TON) 173

TABLE 185 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY TYPE, 2022-2028 (TON) 173

11.4.5 EUROPE COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION 173

TABLE 186 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2017-2021 (USD MILLION) 173

TABLE 187 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2022-2028 (USD MILLION) 174

TABLE 188 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2017-2021 (TON) 174

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

TABLE 189 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY FUNCTION, 2022-2028 (TON) 175

11.4.6 EUROPE COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY 175

TABLE 190 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY, 2017-2021 (USD MILLION) 175

TABLE 191 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY, 2022-2028 (USD MILLION) 176

TABLE 192 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY, 2017-2021 (TON) 176

TABLE 193 EUROPE: COSMETIC ANTIOXIDANTS MARKET, BY COUNTRY, 2022-2028 (TON) 177

11.4.6.1 Germany 177

11.4.6.1.1 Stable per capita spending of consumers to drive market 177

TABLE 194 GERMANY: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 177

TABLE 195 GERMANY: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 178

TABLE 196 GERMANY: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 178

TABLE 197 GERMANY: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 178

11.4.6.2 UK 179

11.4.6.2.1 Increased consumer spending on cosmetic products to drive market 179

TABLE 198 UK: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 179

TABLE 199 UK: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 179

TABLE 200 UK: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 180

TABLE 201 UK: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 180

11.4.6.3 France 180

11.4.6.3.1 Strong foothold of cosmetic manufacturers to drive market 180

TABLE 202 FRANCE: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 180

TABLE 203 FRANCE: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 181

TABLE 204 FRANCE: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 181

TABLE 205 FRANCE: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 181

11.4.6.4 Italy 182

11.4.6.4.1 Rapid population aging to fuel demand for antioxidants 182

TABLE 206 ITALY: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 182

TABLE 207 ITALY: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 182

TABLE 208 ITALY: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 183

TABLE 209 ITALY: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 183

11.4.6.5 Russia 183

11.4.6.5.1 Increasing aging population to boost demand for cosmetic antioxidants 183

TABLE 210 RUSSIA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 183

TABLE 211 RUSSIA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 184

TABLE 212 RUSSIA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 184

TABLE 213 RUSSIA: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 184

11.4.6.6 Spain 185

11.4.6.6.1 Use of high-quality cosmetic ingredients in skin care products to drive market 185

TABLE 214 SPAIN: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (USD MILLION) 185

TABLE 215 SPAIN: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (USD MILLION) 185

TABLE 216 SPAIN: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2017-2021 (TON) 186

TABLE 217 SPAIN: COSMETIC ANTIOXIDANTS MARKET, BY APPLICATION, 2022-2028 (TON) 186

1 INTRODUCTION 29

1.1 STUDY OBJECTIVES 29

1.2 MARKET DEFINITION 30

1.3 MARKET SCOPE 30

1.3.1 MARKETS COVERED 30

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

FIGURE 1	CALIBRATION SERVICES MARKET SEGMENTATION	30
1.3.2	INCLUSIONS AND EXCLUSIONS	31
1.3.3	GEOGRAPHICAL SCOPE	31
FIGURE 2	GEOGRAPHICAL SCOPE	31
1.3.4	YEARS CONSIDERED	32
1.4	CURRENCY CONSIDERED	32
1.5	LIMITATIONS	32
1.6	STAKEHOLDERS	33
1.7	SUMMARY OF CHANGES	33
1.7.1	IMPACT OF RECESSION	34
2	RESEARCH METHODOLOGY	35
2.1	RESEARCH DATA	35
FIGURE 3	CALIBRATION SERVICES MARKET: RESEARCH DESIGN	36
2.1.1	SECONDARY AND PRIMARY RESEARCH	36
FIGURE 4	CALIBRATION SERVICES MARKET: RESEARCH APPROACH	37
2.1.2	SECONDARY DATA	38
2.1.2.1	List of key secondary sources	38
2.1.2.2	Key data from secondary sources	38
2.1.3	PRIMARY DATA	39
2.1.3.1	Primary interviews with experts	39
FIGURE 5	BREAKDOWN OF PRIMARIES	39
2.1.3.2	Key industry insights	40
2.1.3.3	Key data from primary sources	40
2.2	MARKET SIZE ESTIMATION	41
FIGURE 6	MARKET SIZE ESTIMATION METHODOLOGY: SUPPLY-SIDE ANALYSIS	41
2.3	FACTOR ANALYSIS	42
2.3.1	SUPPLY-SIDE ANALYSIS	42
FIGURE 7	MARKET SIZE ESTIMATION METHODOLOGY: APPROACH 1 (SUPPLY-SIDE ANALYSIS) - REVENUES GENERATED BY COMPANIES FROM CALIBRATION SERVICES	42
2.3.2	DEMAND-SIDE ANALYSIS	43
FIGURE 8	MARKET SIZE ESTIMATION METHODOLOGY: APPROACH 2 (DEMAND-SIDE ANALYSIS) - SHARE OF CALIBRATION SERVICES IN EACH REGION	43
2.3.3	BOTTOM-UP APPROACH	44
2.3.3.1	Estimation of market size using bottom-up approach (demand side)	44
FIGURE 9	CALIBRATION SERVICES MARKET: BOTTOM-UP APPROACH	44
2.3.4	TOP-DOWN APPROACH	45
2.3.4.1	Estimation of market size using top-down approach (supply side)	45
FIGURE 10	CALIBRATION SERVICES MARKET: TOP-DOWN APPROACH	45
2.4	MARKET BREAKDOWN AND DATA TRIANGULATION	45
FIGURE 11	DATA TRIANGULATION METHODOLOGY	46
2.5	RISK ASSESSMENT	46
TABLE 1	RISK FACTOR ANALYSIS	46
2.6	PARAMETERS CONSIDERED TO ANALYZE IMPACT OF RECESSION ON CALIBRATION SERVICES MARKET	47
2.7	RESEARCH ASSUMPTIONS AND LIMITATIONS	48
2.7.1	ASSUMPTIONS	48
2.7.2	LIMITATIONS	48
3	EXECUTIVE SUMMARY	49

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

FIGURE 12 CALIBRATION SERVICES MARKET, 2019-2030 (USD MILLION) 49

FIGURE 13 DIMENSIONAL CALIBRATION SERVICE TYPE TO REGISTER HIGHEST CAGR DURING FORECAST PERIOD 50

FIGURE 14 THIRD-PARTY VENDOR SEGMENT ESTIMATED TO HOLD LARGEST MARKET SHARE DURING FORECAST PERIOD 51

FIGURE 15 AEROSPACE & DEFENSE APPLICATION TO DISPLAY HIGHEST GROWTH RATE FROM 2023 TO 2030 51

FIGURE 16 ASIA PACIFIC TO RECORD HIGHEST CAGR DURING FORECAST PERIOD 52

4 PREMIUM INSIGHTS 53

4.1 ATTRACTIVE GROWTH OPPORTUNITIES FOR MARKET PLAYERS IN CALIBRATION SERVICES MARKET 53

FIGURE 17 INCREASING DEMAND FOR ACCURATE MEASUREMENTS AND PRECISIONS IN VARIOUS INDUSTRIES TO DRIVE MARKET 53

4.2 CALIBRATION SERVICES MARKET, BY PROOFREADING 53

FIGURE 18 THIRD-PARTY VENDOR SEGMENT ESTIMATED TO SECURE LARGEST MARKET SHARE DURING FORECAST PERIOD 53

4.3 CALIBRATION SERVICES MARKET, BY SERVICE TYPE 54

FIGURE 19 ELECTRICAL SEGMENT TO ACCOUNT FOR LARGEST MARKET SIZE THROUGHOUT FORECAST PERIOD 54

4.4 CALIBRATION SERVICES MARKET, BY APPLICATION 54

FIGURE 20 INDUSTRIAL & AUTOMATION APPLICATION TO HOLD LARGEST MARKET SHARE DURING FORECAST PERIOD 54

4.5 CALIBRATION SERVICES MARKET, BY REGION 55

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

Calibration Services Market by Proofreading (In-house, OEM, Third-party Vendor), Application (Mechanical, Electrical, Dimensional, Thermodynamics), Application (Industrial & Automation, Electronics, Aerospace & Defence) and Region - Forecast to 2030

Market Report | 2023-08-11 | 251 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"/>

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

Zip Code*

Country*

Date

2025-05-21

Signature

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com