

SUMMARY

2017 version [Toner Market Forecast]

**Future Prospects of the
Toner Industry:
A Call for Cost Competitiveness to
Recreate the Market**

*=Manufacturers vow to establish integrated office solutions
and added value on commercial printing=*



Fuji Xerox leading the industry with its toner development (Takematsu Center)



Kao -- top maker of polyester-based resin but also develops fluorescent and other special toner



Indian Toners & Developers leads the growing Indian market (ITDL Imagetec, its production subsidiary in photo)



Taiwan-based Trend Tone Imaging growing in the after-market

I. Theme of Research

2017 version [Toner Market Forecast]
“Future Prospects of the Toner Industry:
A Call for Cost Competitiveness to Recreate the Market”
*=Manufacturers vow to establish integrated office solutions and
added value on commercial printing=*

II. Scope of Research

Amid the advancement of the global transformation of copier and laser printer manufacturers, how should the toner industry -the pillar of the profit for such manufacturers- face the transformation?

Office-use toner as small as $4.6\ \mu\text{m}$ has already been developed and available in gold, silver, white, clear, green, orange, and other colors so it would be recognized as value-added toner in many other industries. **As for the commercial printing industry, manufacturers are gradually replacing some of the traditional analog printing devices**, while dealing with emerging competitive inkjet printers with flexible applications.

Aside from this, competition with Chinese manufacturers promoting low-cost toner is getting more intense. **How do Japanese manufacturers handling cost-first pulverized toner survive the Chinese Wave?** Will Japanese makers choose to form a capital alliance with the Chinese counterparts, as seen in the past among the Japanese and Chinese motorbike manufacturers? Or **will Japanese manufacturers partner strategically with one another beyond responsibility and begin joint development to become mutually profitable? Is this the only way for the Japanese office-equipment industry to maintain itself for tomorrow?**

How will the Japanese manufacturers cope with the imminent arrival of a growing number of Chinese manufactures, when they only have patent-backed quality products to offer?

With the anticipation of even grimmer outlook on the office-equipment industry and fewer incoming players in the market, **how will toner manufacturers prepare themselves to develop, produce, and sell products that distinguish themselves, or even make a friendly or hostile merger to survive?**

With all this in mind, the toner report will focus on the future prospects of the toner industry. How will toner manufacturers handle the smaller-sized toner in a variety of colors, as well as its low-temperature fusing property? How will they interpret the meaning to use pulverized toner? And how will toner material manufacturers (resin, carrier, magnetic oxide, colorants, CCA, external additives, wax, and carbon black) react? The report will present the detailed analysis on these various viewpoints.

In line with this, we attempt to shed light on the future course the toner industry may take, as well as how the industry will transform itself along the way.

III. Subject of Research

1. Items in Scope

1) Toner

- (1) Pulverized toner (color and monochrome)
- (2) Chemically prepared toner (color and monochrome)

2) Resin for toner

- (1) Polyester type resin (2) Styrene-acrylic type resin (3) Other types

3) Carrier 4) Magnetic oxide 5) Charge control agents (CCA)

6) Colorants for color toner 7) External additives 8) Carbon black

9) Toner wax 10) Other related items

2. Makers in Scope

1) Major manufacturers and dealers

Toner manufacturers (77) / Resin manufacturers for toner (17) / Carrier manufacturers (4) / Magnetic oxide manufacturers (4) / CCA manufacturers (7) / Colorant manufacturers (9) / External additive manufacturers (13) / Wax manufacturers (9) / Carbon black manufacturers (3)

2) Other related manufacturers

IV. Research Period and Research Method

1. Research Period

From 2015 to 2021

2. Research Method

- 1) Direct and on-site interviews to individual target makers
- 2) Analysis and review of open sources such as literature, materials, and statistics
- 3) Analysis of the in-house collected database

V. Research Form and Period

1. Research Form

This is a multi-client study.

2. Research Analysis and Editing Period

From July to mid-August, 2017

3. Publication Date (A4 template; PDF only)

October 20, 2017 (English version)

(2016 version contains 584 pages)

4. How to Apply

Please apply via email. Please indicate your company name, department, office phone number, and your name before sending it to us at infods@datasupply.jp

5. Subscription fee

\$6,000 (English version)

6. Researchers

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Extract from "Comprehensive Analysis"

(Actual figures and comments are shown in the full version.)

4) Application and production volume of value-added toner

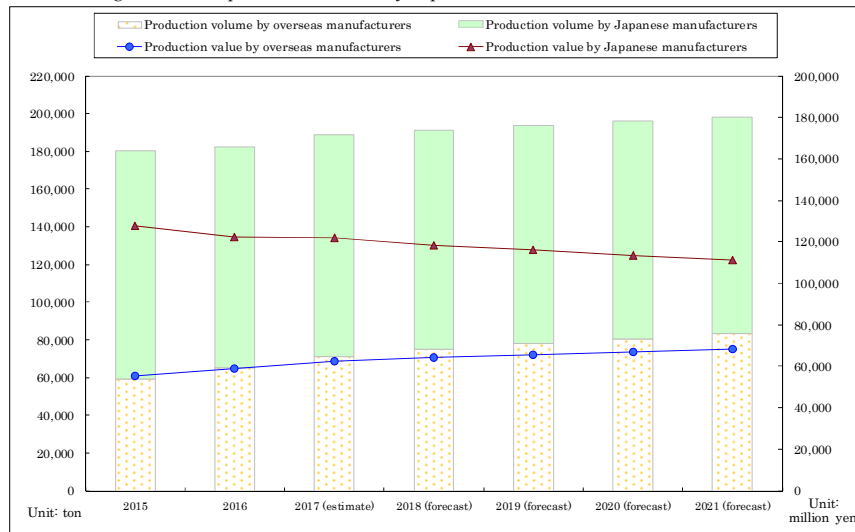
Toner type	Manufacturer	Production volume	Application
Clear	Fuji Xerox, Canon, Ricoh, Oki Data, Xeikon, Kodak	It's often used for production and professional-use printers. 1-3 tons are produced by each manufacturer and the figure	Used for security, value-added printing (business cards, packages, etc.) and undercoat of rough
White	Xerox, Fuji		
Fluorescent	Mitsubishi, Ricoh, G		
Gold and silver	Fuji, ta		
Biomass	Sony, C		
Invisible toner	Toshiba		
Red, green, blue, extra magenta, super black	Xerox		
Pearl	Kodak		
A particle diameter of 5 μm or smaller	Fuji, Ricoh		

Value-added toner, small-particle toner, more they can promote. Manufacturers promote packaging use. It is White toner is used its high airtight property. Ways to use fluorescent. Meanwhile, gold and marketability. Biomass toner has Toshiba TEC's investment business opportunity making them invisible and available in the especially suitable for Production of 5 μm monochrome production of such type (4.6 μm installed the toner for take a few more years

A. Comprehensive Analysis

1. Worldwide trend of toner production

1) Changes in overall production volume by Japanese and overseas manufacturers (2015-2021)



	2015		2016		2017 (estimate)		2018 (forecast)		2019 (forecast)		2020 (forecast)		2021 (forecast)	
	Unit: ton	%	Unit: ton	%	Unit: ton	%	Unit: ton	%	Unit: ton	%	Unit: ton	%	Unit: ton	%
Production volume by overseas manufacturers														
Production volume by Japanese manufacturers														
Total														

	2015		2016		2017 (estimate)		2018 (forecast)		2019 (forecast)		2020 (forecast)		2021 (forecast)	
	Unit: million yen	%	Unit: million yen	%	Unit: million yen	%	Unit: million yen	%	Unit: million yen	%	Unit: million yen	%	Unit: million yen	%
Production value by overseas manufacturers														
Production value by Japanese manufacturers														
Total														

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Extract from "Toner Market" and "Resin Market"

3) Polyester													ton / year
Resin maker	Sanyo Chemical Industries	Fujikura Kasei	Mitsui Chemicals	Image Polymers (U.S.A.-U.K.)	Mitsubishi Chemical	Dianal America (U.S.A.)	DIC	Kao	Kao (U.S.A.-Spain)	Seiko PMC	Sub total	unknown	Total
Toner maker													
Canon													
Ricoh													
Fuji Xerox													
Konica Minolta													
Kyocera Document Solutions													
Sharp													
Toshiba TEC													
Tomoe-gawa													
Mitsubishi Chemical													
Kao													
FDK													
Sakata Inx													
Inex													
Daiken Chemical													
Mikasa Sangyo													
Others													
Total													
Country													
Xerox (U.S.A.)													
Canon (U.S.A.)													
Ricoh (U.S.A.)													
Ricoh (U.K.)													
Ricoh (France)													
Ricoh (China)													
Sharp (U.S.A.)													
Toshiba TEC (U.S.A.)													
Toshiba TEC (France)													
Tomoe-gawa (U.S.A.)													
Tomoe-gawa (China)													
Mitsubishi Chemical (U.S.A.)													
DIC (U.S.A.)													
Kao (Spain)													
Inex (U.S.A.)													
Non-Japanese													
Others													
Total													
Total by site													
Total													

B. Toner Market

1. Changes in production volume of overseas manufacturers

1) Changes in production volume by application and component (2015-2021)

Application / Toner type		Unit: ton						
		2015	2016	2017 (estimate)	2018 (forecast)	2019 (forecast)	2020 (forecast)	2021 (forecast)
PPC	Dual component	%	%	%	%	%	%	%
	Non-magnetic mono component							
	Magnetic mono component							
Total								
① Analog PPC								
PPC	Dual component							
	Non-magnetic mono component							
	Magnetic mono component							
Total								
② Digital PPC								
PPC (①+②) Total								
Printer	Dual component							
	Non-magnetic mono component							
	Magnetic mono component							
Total								
③ Printer								
FAX	Dual component							
	Non-magnetic mono component							
	Magnetic mono component							
Total								
④ FAX								
Digital (②+③+④) Total								
Black (①+②+③+④) Total								
Full color	PPC Dual component							
	Non-magnetic mono component							
	Digital PPC Total							
Printer	Dual component							
	Non-magnetic mono component							
	Printer Total							
Full color Total								
Mono color								
Color Total								
Toner	Dual component							
	Non-magnetic mono component							
	Magnetic mono component							
Mono color								

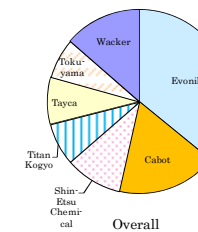
Extract from "Market of Carrier" and "External Additives Market"

8) Changes in production volume by maker and type (2015-2021)
(1) Production volume

	2015		2016		2017 (estimate)		2018 (forecast)		2019 (forecast)		2020 (forecast)		2021 (forecast)	
		%		%		%		%		%		%		%
Evonik		%		%		%		%		%		%		%
Cabot		%		%		%		%		%		%		%
Shin-Etsu Chemical		%		%		%		%		%		%		%
Tokuyama		%		%		%		%		%		%		%
Wacker		%		%		%		%		%		%		%
Silica		%		%		%		%		%		%		%
Evonik		%		%		%		%		%		%		%
Titan Kogyo		%		%		%		%		%		%		%
Tayca		%		%		%		%		%		%		%
Titanium oxide		%		%		%		%		%		%		%
Evonik		%		%		%		%		%		%		%
Cabot		%		%		%		%		%		%		%
Other materials		%		%		%		%		%		%		%

Evonik		%
Cabot		%
Shin-Etsu Chemical		%
Titan Kogyo		%
Tayca		%
Tokuyama		%
Wacker		%
Total		%

Other than the chart above, Tayca silica products. Some of them are



6) Changes in production volume by type and particle size (2015-2021)

Particle size (μm)	2015		2016		2017 (estimate)		2018 (forecast)		2019 (forecast)		2020 (forecast)		2021 (forecast)	
		%		%		%		%		%		%		%
less than 50														
50-less than 80														
80-less than 100														
from 100 up														
Iron Powder		%		%		%		%		%		%		%
less than 50														
50-less than 80														
80-less than 100														
from 100 up														
Ferrite		%		%		%		%		%		%		%
less than 50														
50-less than 80														
80-less than 100														
from 100 up														
Magnetite		%		%		%		%		%		%		%
less than 50														
50-less than 80														
80-less than 100														
from 100 up														
Resin		%		%		%		%		%		%		%
less than 50														
50-less than 80														
80-less than 100														
from 100 up														
Total		%		%		%		%		%		%		%

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<Table of Contents>

A. Comprehensive Analysis

1. Worldwide trend of toner production 1
 1) Changes in overall production volume by Japanese and overseas manufacturers (2015-2021) 2) Changes in overall production volume by application and component (2015-2021) 3) Breakdown of toner production volume of office printing and professional printing (2016) 4) Application and production volume of value-added toner 5) Changes in production volume by production method and type (2015-2021) 6) Changes in production volume of toner for OEM and third parties (2015-2021) 7) Changes in market share by manufacturer (2015-2021) (1) Overall (2) OEM (3) Third parties 8) Market share by CPT manufacturers (1) Overall (2) Dual component (3) Non-magnetic mono component (4) Magnetic mono component (5) Market share by component, color, and manufacturer 9) Changes in production volume by component (2015-2021) 10) Changes in overall production volume by production region (2015-2021) 11) Changes in overall production volume by component and manufacturer (2015-2021) (1) Overall (2) Magnetic mono component (3) Dual component (4) Non-magnetic mono component (5) Mono color 12) Changes in overall production volume by application and manufacturer (2015-2021) (1) Black toner for analog use (overseas manufacturers / Japanese manufacturers) (2) Black toner for digital use (overseas manufacturers / Japanese manufacturers) (3) Full color toner (overseas manufacturers / Japanese manufacturers) (4) Mono color toner (overseas manufacturers / Japanese manufacturer)

2. Changes in production volume in North American and South American region 34
 1) Changes in production volume by manufacturer (2015-2021) Changes in production volume by manufacturer and component (2015-2021) (1) Magnetic mono component (2) Dual component (3) Non-magnetic mono component (4) Mono color

3. Changes in production volume in European region 45
 1) Changes in production volume by manufacturer (2015-2021) 2) Changes in production volume by manufacturer and component (2015-2021) (1) Magnetic mono component (2) Dual component (3) Non-magnetic mono component (4) Mono color

4. Changes in production volume in Asian and Japanese region 53
 1) Changes in production volume by manufacturer (2015-2021) 2) Changes in production volume by manufacturer and component (2015-2021) (1) Magnetic mono component (2) Dual component (3) Non-magnetic mono component (4) Mono color

5. Toner supply relations to captive manufacturers (2016) 65
 1) Monochrome (Analog / Digital) PPC 2) Monochrome printer / FAX 3) Color PPC 4) Color laser / LED printer 5) Application of CPT

6. Related material market (2015-2021) 70
 1) Resin market 2) Carrier market 3) Magnetic oxide market) CCA market 5) Colorant market for full color toner 6) External additives market 7) Carbon black market 8) Wax market

B. Toner Market

1. Changes in production volume of overseas manufacturers 79
 1) Changes in production volume by application and component (2015-2021) 2) Changes in overall production volume by manufacturer (2015-2021) 3) Changes in production volume of black and full color toner by manufacturer and component (2015-2021) (1) Black toner (① Overall ②by component, a. Magnetic mono component, b. Dual component, c. Non-magnetic mono component) (2) Full color toner (①Overall ②by component, a. Dual component, b. Non-magnetic mono component)

2. Production sites of overseas manufacturers 93
 1) Production sites in North American and South American region 2) Production sites in European region 3) Production sites in Asian region

3. Production trend of individual overseas manufacturers (2015-2021) 97

《Items common among manufacturers》

Changes in production volume by application and component / Production volume by method and type / Breakdown of production volume by office and professional use / Production volume for OEM and third parties / Comments (Company overview)

[1] Coates Toners (U.S.A.) [2] Cosmo AM & T (South Korea) [3] Guangzhou Comet Chemical (China) [4] Handan Hanguang OA Toner (China) [5] Hubei Dinglong (China) [6] Hunt Imaging (U.S.A.) [7] Indian Toners & Developers Ltd. (India) [8] Jadi Imaging Technologies Sdn Bhd (Malaysia) [9] Kodak (U.S.A.) [10] Lexmark International (U.S.A.) [11] Lotte Fine Chemical (South Korea) [12] Nanjing Teshine Imaging Technologies (China) [13] Print-Rite (ICMI China) (China) [14] Raven Industries (U.S.A.) [15] Royal Precision Technology (Taiwan) [16] Tianjin Zhonghuan TCOA Electronics Company Limited (China) [17] Trend Tone Imaging (Taiwan) [18] Troy Group (U.S.A.) [19] Wuhan Pointrole Information Technology (China) [20] Wuhan Zongxiang Imaging (China) [21] Wuxi Jiateng Magnetic Powder (China) [22] Xeikon (Belgium) [23] Xerox Corporation (U.S.A.) [24] Other manufacturers 1) Beijing Orientsun Technology (China) 2) Cangzhou ASC Toner Production (China) 3) Cangzhou HuiBao Toner Production (China) 4) Chengdu JSY (Toner & Film) Technology (China) 5) Color Imaging Technology (South Korea) 6) Digitone (Indonesia) 7) Excellent Color Technology (HuBei) (China) 8) Fujifilm Imaging Colorants (U.K.) 9) Guangzhou Aumes Digital Technology (China) 10) Guangzhou Cetron Office Equipment (China) 11) Guangzhou Shuangyi Sci-technology (China) 12) Guangzhou VIVID Print Material (China) 13) Hebei Fengfua Heavy Mechanical Equipment Manufacturing (China) 14) Henan HaoYinBao Imaging Material (China) 15) Henan Province Lankao Photocopying Supplies Manufacturing (China) 16) Hubei Far East Zhuoyue Technology (China) 17) Huinon Toner Industrial (China) 18) Hunan Province Auking Nanometer Technology (China) 19) Integral GmbH (Germany) 20) IPM (Imaging Products Manufacturing) (Turkey) 21) Jiangsu Jinhui Toner Technology (China) 22) Navran Advanced Nanoproducts Development International (India) 23) Ningbo Flexitone New Materials (China) 24) Pure Toners & Developers (India) 25) Rathi Graphic Technologies (India) 26) Real Color Corporation (China) 27) RosToner (Russia) 28) Sindoh (South Korea) 29) Toner Technology Co., Ltd. Henan Huaxiang (China) 30) Union Chemical (South Korea) 31) Wuxi Longkang Electric Technology (China) 32) Wuxi Meiling Digital Science and Technology (China) 33) Zhuhai Yvian Digital Technology: China (China)	
4. Production trend of Japanese manufacturers	154
1) Changes in production volume by application and component (2015-2021) (1) Worldwide production volume (2) Production volume in Japan (3) Overseas production volume 2) Production volume by method and type (2015-2021) 3) Overall production volume and value of toner (2016) 4) Changes in overall production volume by manufacturer (2015-2021) 5) Changes in production volume of black / full color toner by manufacturer (2015-2021) (1) Black toner (2) Full color toner 6) Changes in toner production volume by method and manufacturer (2015-2021) (1) Overall volume of pulverized toner ① Black pulverized toner ② Full color pulverized toner ③ Mono color pulverized toner (2) Overall volume of chemically prepared toner ① Black chemically prepared toner ② Full color chemically prepared toner 7) Changes in toner production volume by component and manufacturer (2015-2021) (1) Magnetic mono component (black toner) (2) Dual component (black toner + color toner) (3) Dual component (black toner) (4) Dual component (full color toner) (5) Non-magnetic mono component (black toner + color toner) (6) Non-magnetic mono component (black toner) (7) Non-magnetic mono component (full color toner) 8) Changes in toner production volume by manufacturer and resin type (2016) (1) Overall (2) Black toner (3) Full color toner 9) Changes in production volume by manufacturer and particle size (2016) (1) Black toner (2) Full color toner 10) Toner supply to hardware manufacturers and in-house toner production ratio by hardware manufacturers (2016)	
5. Outline of Japanese manufacturers' production sites inside and outside Japan (updated)	195
1) List of production sites 2) List of production sites in Japan 3) List of production sites in North and South American region 4) List of production sites in European region 5) List of production sites in other regions	
6. Production trend of individual Japanese manufacturers	198

《Items common among manufacturers》

Changes in production volume by application and component (Japan and overseas production volume) / Breakdown of production volume by plant / Breakdown of overseas production volume by region / Production volume by method and type / Production volume and value of toner / R&D of toner (Chemically prepared toner / Pulverized toner / Development for emerging and developed countries / Low temperature fusing, environmental responsiveness, energy efficiency, etc.) / Value-added toner / Production volume by component and type, and purchase volume of resin by type / Production volume by color and particle size / Breakdown of production volume by office and professional use / Changes in production volume by user (2015-2017 / breakdown of production volume for OEM and third parties) / Production and development site / Facility investment and changes in R&D spending / Company overview

[1] Canon [2] Ricoh [3] Fuji Xerox [4] Konica Minolta [5] Kyocera Document Solutions [6] Sharp [7] Toshiba TEC [8] Tomoegawa [9] Mitsubishi Chemical [10] DIC [11] Kao [12] FDK [13] Sakata Inx [14] Imex [15] Nippon Zeon [16] Daiken Chemical [17] Mikasa Sangyo [18] Others [18] -1 Casio Computer [18] -2 Panasonic System Networks [18] -3 Oki Data

C. Resin Market

1. Worldwide trend of resin production397
 1) Changes in overall production volume by Japanese and overseas manufacturer (2015-2021)
 2. Production trend of Japanese manufacturers398
 1) Changes in production volume by region and type (2015-2021) 2) Changes in production value by region and type (2015-2021) 3) Production trend by manufacturer (2015-2021) (1) Overall (2) Styrene-acrylic (3) Polyester (4) Others (polyether polyol) 4) Production trend by type and region (2015-2021) (1) Styrene-acrylic (2) Polyester (3) Others (Polyether polyol)
 3. Resin supply to toner manufacturers (2016)407
 1) Overall 2) Styrene-acrylic 3) Polyester 4) Others
 4. Overview of production sites of resin manufacturers411
 1) Production sites in Japan 2) Overview of overseas production sites
 5. Production trend of individual Japanese manufacturers (2015-2021)414

《Items common among manufacturers》

Changes in production volume by region and type / Changes in production value by region and type / Supply volume to toner manufacturers by resin type / Production volume for OEM and third parties / Handling of chemically prepared toner / Production site (Japan / overseas) / Facility investment and changes in R&D spending / Company overview

[1] Sanyo Chemical Industries [2] Fujikura Kasei [3] Mitsui Chemicals [4] Mitsubishi Chemical [5] DIC [6] Kao [7] Seiko PMC [8] Others [8] -1 Japanese manufacturers 1) Nippon Carbide Industries [8] -2 Overseas manufacturers 1) SK Chemicals (South Korea) 2) Samyang (South Korea) 3) Tianjin Synthetic Material Research Institute (China) 4) Zhangjiagang Weidesen Chemical (China) 5) Hubei Far East Zhuoyue Technology (China) 6) Wuhan Hanhu Polymer Material (China) 7) Wuxi Jiateng Magnetic Powder (China) 8) Handan City New Toner Resin Limited Company (China) 9) Cangzhou Tiantongyuan (China) 10) Shiva Performance Materials (India)

D. Related Material Market

1. Carrier market445
 1) Production volume by manufacturer (2015-2021) 2) Production value by manufacturer (2015-2021) 3) Changes in production volume by type and manufacturer (2015-2021) (1) Iron powder carrier (2) Ferrite carrier (3) Magnetite carrier (4) Resin carrier 4) Changes in production volume by application and type (2015-2021) 5) Changes in production value by application and type (2015-2021) 6) Changes in production volume by type and particle size (2015-2021) 7) Changes in production volume by coating material (2015-2021) 8) Market and technological trend 9) Major supply relations of carrier manufacturers 10) Production sites by manufacturer 11) Individual manufacturers [1] Powdertech [2] Kanto Denka Kogyo [3] Dowa Electronics [4] Toda Kogyo

2. Magnetic oxide market	477
1) Changes in production volume by manufacturer (2015-2021) 2) Changes in supply value by manufacturer (2015-2021) 3) Major users by manufacturer (2016) 4) Production sites by manufacturer 5) Individual manufacturers (2015-2021) [1] Toda Kogyo [2] Mitsui Mining & Smelting [3] Titan Kogyo [4] Kanto Denka Kogyo	
3. CCA market	484
1) Changes in production volume by type (2015-2021) 2) Latest technological trend (1) Handling of color toner (2) Environmental responsiveness 3) Price trend 4) Major users by CCA manufacturer (2016) 5) Production sites by manufacturer 6) Changes in production volume by polar character (positive or negative) (2015-2021) (1) Production volume (2) Production value 7) Individual manufacturers (2015-2021) [1] Orient Chemical Industries [2] Hodogaya Chemical [3] Clariant [4] Fujikura Kasei [5] Others [5]–1 Japan Carlit [5]–2 Chuo Synthetic Chemical [5]–3 Hubei Dinglong Chemical (China)	
4. Market of colorants (Y.M.C.) for full color toner	504
1) Changes in production volume by color (2015-2021) 2) Changes in production value by color (2015-2021) 3) Market trend 4) Leading products and prices 5) Use rate 6) Changes in production volume by manufacturer and type (2015-2021) (1) Production volume (2) Production value (3) Supply relations of colorant manufacturers 7) Individual manufacturers [1] Dainichiseika Color & Chemicals Mfg. [2] Clariant [3] Sanyo Color Works [4] Toyo Color [5] DIC [6] Others [6]–1 BASF [6]–2 Fuji Pigment [6]–3 Tokyo Shikizai Industry [6]–4 Daido Chemical	
5. External additives market	533
1) Changes in production volume of external additives by type (2015-2021) 2) Changes in production value of external additives by type (2015-2021) 3) External additives for toner by type 4) Additives used by manufacturer 5) Leading products and prices 6) Recent trend 7) New external additives manufacturer 8) Changes in production volume by manufacturer and type (2015-2021) (1) Production volume (2) Production value 9) Supply relations of external additives 10) Individual manufacturers (2015-2021) [1] Evonik [2] Cabot [3] Shin-Etsu Chemical [4] Titan Kogyo [5] Tayca [6] Tokuyama [7] Wacker [8] Others [8]–1 Fuso Chemical [8]–2 Denka [8]–3 Sakai Chemical Industry [8]–4 Soken Chemical & Engineering [8]–5 Nippon Shokubai [8]–6 SukgyungAT (South Korea)	
6. Carbon black market	566
1) Changes in production volume and value of carbon black (2015-2021) 2) Major carbon black manufacturers (2016) 3) Basic properties and expectations 4) Leading products and environmental responsiveness 5) Production volume for OEM and third parties 6) Volume of additives used 7) Facility investment and changes in R&D spending 8) Company overview	
7. Toner wax market	569
1) Changes in production volume and value of wax (2015-2021) 2) Ratio of production by wax type (2016) 3) Wax type and manufacturers 4) Wax price 5) Facility investment and changes in R&D spending 6) Company overview	

*** Official Publications of the Toner Market Forecast Report ***

Title	Published date
1. "Future Aspects of Toner for High-speed Printers and POD, and Related Materials"	September, 2007
2. "Structure Analysis of Toner Market Transformed by Newly Introduced Chemically Prepared Toner"	September, 2008
3. "Structure Analysis of Toner And Related Market Facing an Emergence of Major CPT Manufacturers"	September, 2009
4. "Amid Dwindling Specialized Toner Manufacturers: Comprehensive Breakdown of Toner and Related Markets"	September, 2010
5. "Recovery from 3.11 on the Toner Industry Long Time Forecast for Toner and Related Market"	March, 2011
6. "Strategy of the Toner Industry in a Slow-growth Market"	September, 2012
7. "Forecast of the Toner Industry that Counts on Newly Emerging Countries"	September, 2013
8. "Forecast of the Toner Industry Lead by Ultrafine Particle Toner"	September, 2014
9. "Toner Industry Revitalizes the Market through the Provision of Value-added Toners"	September, 2015
10. "Outlook for the Toner Industry that Will Continue to Strive for Excellence in High-quality Toner Products"	October, 2016