





## bizhub C3100P

Service Launch Guide

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bizhub C3100P Eco Declaration



Specification & Installation Guide



06/02/2014

#### bizhub C3100P Specifications

| opecinications   |  |
|--|--|
| Electrophotographic Laser Printer  |  |
| 600 x 600 dpi<br>1200 x 1200 dpi   |  |
| Plain Paper: 16–24 lb. bond (60–90 gsm) Thick Stock: 110 lb. index (91–210 gsm*) Duplexing: 33–110 lb. index (60–210 gsm) Glossy stock*, laser-quality labels*, envelopes**, postcards*, letterhead*, recycled paper  *Via multipurpose and standard tray only.  **Via multipurpose tray only. |  |
| Multipurpose Tray: 4" x 6" to 8.5" x 14" Standard Tray: 4" x 6" to 8.5" x 11" Lower Feeder: 8.5" x 11" or 8.5" x 14"   |  |
| Multipurpose Tray: 100 sheets<br>Standard Tray: 250 sheets<br>Lower feeder Unit: 500 sheets  |  |
| Plain Paper: 200 sheets (face down)  |  |
| Less than 36 seconds (power on to ready) (at room temperature/73.4° F)   |  |
| Leading edge: 0.165" Trailing edge: 0.165" Rear edge: 0.165" Front edge: 0.165"  |  |
| Full Color: 12.9 seconds or less<br>Black: 12.9 seconds or less  |  |
|  |  |

| Print Speed:<br>(Full Color/B&W) | Full Color:<br>B&W:      | 32 ppm (letter) single-sided<br>32 ppm (letter) single-sided |
|----------------------------------|--------------------------|--|
| Power requirements               | 120 VAC/6                | 60 Hz  |
| Power consumption                | 1000 W o                 | rless  |
| Dimensions (WxDxH)               | 17.6" x 21.              | 4" x 13.8"   |
| Memory                           | 1 GB (2 G                | B max.)  |
| Hard Disk Space                  | Optional 3               | 20 GB HDD  |
| Weight Approx.                   | Approx. 62<br>(base unit | 2.4 lbs.<br>with consumables)                                |

#### **Duty Cycle**

Up to 120,000 Maximum monthly print volume supported under standard vendor supplied service. Customers should consider multiple machines if average monthly volume approaches duty cycle on a continual basis.

#### **Environmental Requirements**

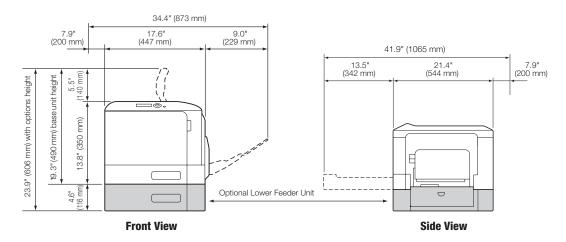
| Temperature                        | 50° F to 86° F |
|------------------------------------|----------------|
| Humidity                           | 15% to 85%     |
| Noise while engine under operation | 71 db or less  |

#### **Electrical Requirements**

| Line options | Dedicated   |
|--------------|-------------|
| Voltage      | 120 V/60 Hz |

#### **bizhub C3100P Space Requirements**

To ensure easy operation, consumable replacement and maintenance, adhere to the recommended space requirements detailed below.



## Specification & Installation Guide



#### **Component Considerations**

#### HD-P06 Hard Disk Drive\*



| Туре      | Internal Hard Drive  |
|-----------|--|
| Capacity  | 320 GB   |
| Functions | Adds additional memory, security, and convenience functions. Required for printing from USB. |

#### PF-P14 Lower Feeder Unit



| Туре                 | 1 x 500 sheet drawer     |
|----------------------|--------------------------|
| Support Paper Weight | 16-24 lb bond            |
| Support Paper Size   | 8.5" x 11" to 8.5" x 14" |
| Paper Capacity       | 500 Sheets               |
| Power Requirements   | Supplied from main body  |

#### SCD-25 Copy Desk



| Type     | Storage drawer only   |
|----------|---|
| Function | Storage of accessories, paper, supplies, etc. Brings machine to working height. |

#### 1 GB Expanded Memory Unit\*



| Туре      | DIMM                               |
|-----------|------------------------------------|
| Capacity  | 1 GB                               |
| Functions | Increases the printable file size. |

#### SX-4600WAN Wireless Network Adapter



| Туре      | Miscellaneous Option            |
|-----------|---------------------------------|
| Functions | Provides wireless connectivity. |

 $<sup>^{\</sup>ast}\,$  Can only be purchased from Konica Minolta.

# **Konica Minolta bizhub C3100P** Specification & Installation Guide





| U-201H Proximity Card Authentica | ation Unit**                            |   |
|----------------------------------|---|---|
| ^                                | Dimensions (WxHxD)                      | 3.625" x 2.5" x 0.625"                                    |
|                                  | Weight                                  | 0.25 lb.  |
|                                  | Power Supply                            | Supplied from USB Port                                    |
|                                  | System Conditions (operating mode)      | Ambient Temperature: 32°to 104° F<br>Humidity: 20% to 85% |
|                                  | System Conditions (non-operating mode)  | Ambient Temperature: -4°to 122° F<br>Humidity: 20% to 85% |
|                                  | Radio Law Division                      | Self-Guided Read-Write Communication Facility             |
|                                  | Applicable Card                         | ISO 14443 Type A, FeliCa-based non-contact IC Card        |
|                                  | Acquired Standard                       | VCCI Class B  |
| U-202H HID iClass Card Reader*   | *                                       |   |
|                                  | Dimensions (WxHxD)                      | 4.0" x 1.9" x 0.09"                                       |
|                                  | Weight                                  | 0.25 lb.  |
|                                  | Power Supply                            | Supplied from USB Port                                    |
|                                  | System Conditions (operating mode)      | Ambient Temperature: 31° to 150° F<br>Humidity: 5% to 95% |
|                                  | Transmit Frequency                      | 13.56 MHz   |
|                                  | Environmental                           | IP55  |
|                                  | Certifications                          | UL294/cUL (US), FCC Certification (US), IC (Canada), RoHS |
|                                  | Card Type Compatibility                 | All HID 2k, 16k or 32k iClass Cards                       |
|                                  | HID iClass Card<br>Format Compatibility | 26-bit, HID Corporate 1000®                               |
| K-106 i-Option License Kit**     |   |   |
|                                  | Туре                                    | License key   |
|                                  | Function                                | Supports Barcode Font Printing                            |
| K-107 i-Option License Kit**     |   |   |
|                                  | Туре                                    | License key   |
|                                  | Function                                | Supports Unicode Font Printing                            |
| K-108 i-Option License Kit**     |   |   |
|                                  | Туре                                    | License key   |
|                                  | Function                                | Supports OCR Font Printing                                |
| K-111 i-Option License Kit       |   |   |
|                                  | Туре                                    | License Key   |
|                                  |   | Provides ThinPrint® client support                        |

<sup>\*\*</sup> Requires optional Hard Disk Drive HD-P06.

## Specification & Installation Guide



#### **Component Considerations**

#### **CS-1 Convenience Stapler**



| Туре               | Standalone electronic stapler                          |
|--------------------|--|
| Stapling Capacity  | Up to 50 sheets  |
| Paper Weight       | Up to 90 gsm   |
| Durability Cycle   | Up to 200,000 stapling operations                      |
| Staple Position    | Side or corner of document                             |
| Type of Clinch     | Flat clinch  |
| Dimensions (WxHxD) | 5.31' x 5.7" x 7.48"                                   |
| Weight             | Approx. 3.74 lb.                                       |
| Power Supply       | AC adaptor (supplied). Separate power output required. |
| Refill Staples     | SK-602 (No. 505: 5,000 staples)                        |

## Specification & Installation Guide



#### **Standard Paper Tray Support**

| Main Unit - bizhub C3100P (Standard Tray and Multipurpose) |            |                       |                     |  |  |
|--|------------|-----------------------|---------------------|--|--|
| Component  | Capacity   | Size                  | Weight              |  |  |
| Multipurpose   | 100 sheets | 4" x 6" to 8.5" x 14" | Up to 110 lb. index |  |  |
| Standard Tray  | 250 sheets | 4" x 6" to 8.5" x 11" | Up to 110 lb. index |  |  |

#### **Print Controller** (Standard)

| FI IIIL GUIILI UI    | Fillit Guitti ulici (Starluaru)   |  |  |  |  |
|----------------------|---|--|--|--|--|
| Туре                 | Emperon Print System  |  |  |  |  |
| CPU                  | MV78230 (1.066 GHz)   |  |  |  |  |
| Memory               | 1 GB (2 GB max.)  |  |  |  |  |
| Print Speed          | Color: 32 ppm Letter Portrait<br>B&W: 32 ppm Letter Portrait  |  |  |  |  |
| Print Resolution     | 600 x 600 dpi<br>1200 x 1200 dpi  |  |  |  |  |
| PDL                  | PostScript 3, PCL 6, XPS  |  |  |  |  |
| Ethernet<br>Protocol | TCP/IP, IPP over SSL, IPv6, DPWS (WSD),<br>IPsec (IPv6), NTP, SSL/TLS, Dynamic DNS,<br>LLTD, IEEE 802.1x, DHCPv6, HTTP, HTTPS,<br>IPP 1.1, SNMP, FTP, DHCP, Boot P, SLP, SMB  |  |  |  |  |
| Supported OS         | Windows XP x32/x64 (SP2), Windows Vista x32/x64, Windows 7 x32/x64, Windows 8 x32/x64, Windows Server 2003 x32/x64, Windows Server 2008 x32/x64; Macintosh OS X (10.2.8 or later), SuSE Linux Enterprise Desktop 10, Red Hat Enterprise Linux 5 Desktop |  |  |  |  |
| Font                 | PCL Resident Fonts: 80 outline<br>PS3 Emulation Resident Fonts: 137   |  |  |  |  |
| Interface            | Gigabit Ethernet (10/100/1000BaseTX);<br>USB 2.0; USB 1.1   |  |  |  |  |
|                      |   |  |  |  |  |

#### **Print Drivers**

| Page Description<br>Language | Printer<br>Driver | Supported<br>Operating Systems   |
|------------------------------|-------------------|--|
| PCL 6<br>Emulation           | Konica<br>Minolta | Windows 7 x64/Windows 7,<br>Windows 8, Windows Vista x64/<br>Windows Vista/Server 2003 x64/<br>Server 2003/XP x64/<br>XP (SP2+)/2000 (SP4+)  |
| PostScript 3<br>Emulation    | Konica<br>Minolta | Windows 7 x64/ Windows 7,<br>Windows 8, Windows Vista x64/<br>Windows Vista/Server 2003 x64/<br>Server 2003/XP x64/<br>XP (SP2+)/2000 (SP4+) |
| PPD                          | Konica<br>Minolta | Macintosh OS X 10.2.8 or later   |
| XPS v1.0*                    | Konica<br>Minolta | Windows Vista x64/Vista,<br>Windows 7 x64/Windows 7,<br>Windows 8  |

#### **Print Specifications**

| Item                             | Specifications  |  |  |  |  |
|----------------------------------|---|--|--|--|--|
|                                  | •   |  |  |  |  |
| Model                            | Built-in print system   |  |  |  |  |
| Power Supply                     | Common with the main body   |  |  |  |  |
| CPU                              | MV78230 (1.066 GHz)   |  |  |  |  |
| RAM                              | 1 GB (2 GB max.)  |  |  |  |  |
| Hard Disk                        | 320 GB (Optional)   |  |  |  |  |
| Interface                        | Standard Ethernet 10/100/1000 Base TX,<br>Standard USB 2.0, USB 1.1   |  |  |  |  |
| Ethernet Protocol                | TCP/IP, IPP over SSL, IPv6, DPWS (WSD),<br>IPsec (IPv6), NTP, SSL/TLS, Dynamic DNS,<br>LLTD, IEEE 802.1x, DHCPv6, HTTP, HTTPS,<br>IPP 1.1, SNMP, FTP, DHCP, Boot P, SLP, SMB  |  |  |  |  |
| Print Speed                      | Color: 32 pages/minute<br>B&W: 32 pages/minute  |  |  |  |  |
| First Print Time                 | Color: 12.9 seconds or less<br>B&W: 12.9 seconds or less  |  |  |  |  |
| Operating Environment Conditions | 50° to 86° F, 15-85% RH   |  |  |  |  |
| Resolution                       | 600 x 600 dpi<br>1200 x 1200 dpi  |  |  |  |  |
| Supported<br>Paper Sizes         | 4" x 6" to 8.5" x 14"   |  |  |  |  |
| Printer Fonts                    | PCL Resident Fonts: 80 outline<br>PS3 Emulation Resident Fonts: 137   |  |  |  |  |
| Compatible<br>Computers          | IBM PC or compatible and Macintosh  |  |  |  |  |
| Supported OS                     | Windows XP x32/x64 (SP2), Windows Vista x32/x64, Windows 7 x32/x64, Windows 8 x32/x64, Windows Server 2003 x32/x64, Windows Server 2008 x32/x64; Wacintosh OS X 10.2.8 or later, SuSE Linux Enterprise Desktop 10, Red Hat Enterprise Linux 5 Desktop |  |  |  |  |

#### **PageScope Software**

PageScope Direct Print\*

#### **Network, Device Management and User Tools**

PageScope Data Administrator
Download Manager\*
Print Status Notifier
Driver Packaging utility
PageScope Mobile
PageScope Net Care Device Manager
PageScope Web Connection
PageScope Enterprise Suite Plug-in
PageScope Account Manager\*
PageScope Authentication Manager\*

PageScope My Print Manager\*

<sup>\*</sup> Requires optional HDD.

## Specification & Installation Guide



#### **Paper Considerations**

### Paper Size Conversion Chart

Paper Letter Legal Statement Custom

Measurement 8.5" x 11" 8.5" x 14" 5.5" x 8.5" 3.6"(W) x 5.8"(H) to 8.5"(W) x 14"(H)

#### **Paper Weight Conversion Chart**

|        |      |        |       |     |       |       |         | Caliper |       |
|--------|------|--------|-------|-----|-------|-------|---------|---------|-------|
| gsm    | Bond | Offset | Cover | Tag | Index | Point | Bristol | inches  | mm    |
| 60.20  | 16   | 40     | 22    | 37  | 33    | 3.2   | 27.4    | 0.0032  | 0.081 |
| 67.72  | 18   | 45     | 24    | 41  | 37    | 3.6   | 30.9    | 0.0036  | 0.092 |
| 75.20  | 20   | 50     | 28    | 46  | 42    | 3.8   | 34.3    | 0.0038  | 0.097 |
| 90.30  | 24   | 60     | 33    | 56  | 50    | 4.8   | 41.2    | 0.0048  | 0.120 |
| 105.35 | 28   | 70     | 39    | 64  | 58    | 5.8   | 48.1    | 0.0058  | 0.147 |
| 109.11 | 29   | 73     | 40    | 62  | 60    | 6.0   | 49.8    | 0.0060  | 0.152 |
| 116.63 | 31   | 81     | 45    | 73  | 66    | 6.1   | 53.2    | 0.0061  | 0.155 |
| 131.68 | 35   | 90     | 48    | 80  | 74    | 6.2   | 60.1    | 0.0062  | 0.157 |
| 135.45 | 36   | 90     | 50    | 82  | 75    | 6.8   | 61.8    | 0.0068  | 0.173 |
| 146.73 | 39   | 100    | 54    | 90  | 81    | 7.2   | 67.0    | 0.0072  | 0.183 |
| 150.50 | 40   | 100    | 56    | 93  | 83    | 7.3   | 68.7    | 0.0073  | 0.185 |
| 161.78 | 43   | 110    | 60    | 100 | 90    | 7.4   | 73.8    | 0.0074  | 0.188 |
| 165.55 | 44   | 110    | 61    | 02  | 92    | 7.6   | 75.5    | 0.0076  | 0.193 |
| 176.83 | 47   | 120    | 65    | 108 | 97    | 8.0   | 80.7    | 0.0078  | 0.198 |
| 199.41 | 53   | 135    | 74    | 122 | 110   | 9.0   | 91.0    | 0.0085  | 0.216 |

#### **Paper Type Specifications**

#### Normal (Plain Paper)

Normal paper is for general use and is called "PPC paper." The normal paper is usually not a recycled paper. Specify [Normal] to the tray to which the normal paper or the recycled paper is loaded.

#### Thick Paper 1

Thick Paper 1 is paper weighing between 24.25 to 40 lb. bond It can be fed via the bypass tray¹ or main tray².

#### **Thick Paper 2**

Thick Paper 2 is paper weighing between 40 to 55.5 lb. bond It can be fed via the bypass tray<sup>1</sup> or main tray<sup>2</sup>.

#### **Envelopes**

Envelopes can be fed through the bypass tray1.

1. Up to 10 sheets.

2. Up to 20 sheets.

## Specification & Installation Guide



#### How to Build a bizhub C3100P System (from start to finish)

#### Step 1: Base Unit

 C3100P Electrophotographic Laser Printer (Includes PS & PCL Controller, Automatic Duplex Unit, 1 GB Standard Memory, Standard USB 2.0 (supports local printing), Toner and CMYK Imaging Units, One-year Warranty)

#### **Step 2: Paper Handling Options**

- O Lower Feeder Unit (500 sheets)
- Automatic Duplex Unit (Standard)

#### **Step 3: Image Controller**

● Emperon Print System (PCL/PS) (Standard)

#### **Step 4: Storage and Memory Options**

- O 320 GB HDD
- O 1 GB Additional Memory

#### Step 5: Finishing Option

O CS-1 Convenience Stapler

#### Step 6: Additional Options

- AU-201H Proximity Card Authentication Unit
- AU-202H iClass Card Authentication Unit
- LK-106 i-Option License Kit Barcode Printing
- LK-107 i-Option License Kit Unicode Font Printing
- LK-108 i-Option License Kit OCR Font Printing
- LK-111 i-Option License Kit ThinPrint® Client Support
- SX-4600 WAN Wireless Network Adapter



## Specification & Installation Guide



#### **Accessory Options for bizhub C3100P Electrophotographic Laser Printer**

| DESCRIPTION                                 | ITEM NO.   | NOTES   |  |  |
|---|------------|---|--|--|
| BASE UNIT                                   |            |   |  |  |
| C3100P Electrophotographic<br>Laser Printer | A6DR011    | Includes PS & PCL Controller, Automatic Duplex Unit, 1 GB Standard Memory,<br>Standard USB 2.0 (supports local printing), Toner and CMYK Imaging Units,<br>and a one-year warranty. |  |  |
| PAPER HANDLING OPTIONS                      |            |   |  |  |
| Lower Feeder Unit (500 sheets)              | A73HWY1    | Lower Feeder Unit adds 500 sheets of paper capacity (8.5" x 11" or 8.5" x 14").   |  |  |
| SCD-25 Copy Desk                            | 7640015306 | Adds storage and mobility. Brings printer to operational height.  |  |  |
| STORAGE AND MEMORY OPTION                   | IS         |   |  |  |
| 320 GB internal hard disk                   | A734WY1    | Adds proof then print, secured job, print and hold, usb flash drive direct print and stored job functions. Required for i-Option and card reader support.                           |  |  |
| 1 GB expansion memory                       | _          | Adds 1 GB memory for faster processing.   |  |  |
| FINISHING OPTION                            |            |   |  |  |
| CS-1  | 7640013463 | Standalone electronic stapler.  |  |  |
| ADDITIONAL OPTIONS                          |            |   |  |  |
| LK-106**                                    | A0PD019    | i-Option License Kit provides Barcode Font printing support.  |  |  |
| LK-107**                                    | A0PD01F    | i-Option License Kit provides Unicode Font printing support.  |  |  |
| LK-108**                                    | A0PD01G    | i-Option License Kit provides OCR Font printing support.  |  |  |
| LK-111                                      | A0PD01K    | i-Option License Kit provides ThinPrint® client support.  |  |  |
| AU-201H**                                   | 7640005064 | Allows access to SFP via HiD proximity cards. Optional HDD required.  |  |  |
| AU-202H**                                   | 7640008394 | Allows access to SFP via HiD iClass cards. Optional HDD required.   |  |  |
| SX-4600WAN                                  | SX4600WAN  | Provides wireless connectivity.   |  |  |

#### **CONSUMABLE YIELDS\***

| ITEM NO. | YIELD   |
|----------|---|
| A73303F  | 30,000  |
| A7330KF  | 30,000  |
| A7330EF  | 30,000  |
| A73308F  | 30,000  |
| A0X5134  | 6,000   |
| A0X5434  | 6,000   |
| A0X5334  | 6,000   |
| A0X5234  | 6,000   |
| A1480Y1  | 100,000   |
| A1480Y2  | 100,000   |
| A1AU0Y1  | 30,000  |
| A148010  | 100,000   |
|          | A73303F A7330KF A7330EF A73308F A0X5134 A0X5434 A0X5234 A1480Y1 A1480Y2 A1AU0Y1 |

<sup>\*</sup> Approximate yield at 5% coverage. \*\* Requires optional hard disk drive.

### **Documentation Information**



All documentation can be downloaded from MyKonicaMinolta.com by clicking on Product Reference Materials under the Products Portlet.

#### **User Manuals**

bizhub C3100P Safety Information Guide

bizhub C3100P Quick Start User Guide

bizhub C3100P Print Functions User Guide

bizhub C3100P Introduction User Guide

bizhub C3100P Maintenance Troubleshooting User Guide

bizhub C3100P Description of Utility Keys

bizhub C3100P Applied Functions User Guide

bizhub C3100P Advanced Functions User Guide

#### **Installation Instructions**

bizhub C3100P Set Up Guide

#### **Service Manuals**

bizhub C3100P PDF Service Manual bizhub C3100P HTML Service Manual

#### **Parts Manuals**

bizhub C3100P Parts Manual PF-P14 Parts Manual HD-P06 Parts Manual

CSES ID-No. DLBT1404074EN01

Model: bizhub C3100P

Title: Mass-production Controller Firmware Maintenance Release 1

2014/4/3

#### 1. Release version and download file name

The newly released program version and download file name are as follows.

#### [Release Version]

| Model            | Program Name        | Current Ver.        | New Ver.            | Download file name     | SHA-256  |
|------------------|---------------------|---------------------|---------------------|------------------------|--|
| bizhub<br>C3100P | Controller firmware | A6DR30G0217-<br>999 | A6DR30G0219-<br>999 | LhizhiihC3100P Cont A6 | 8422a3b6ac31e334e3a158<br>ef2cd5f5c6e987dd7c12161<br>44b705b2b15b9df7fa9 |

[Download file name] bizhubC3100P\_Cont\_A6DR30G0219-999.zip PRI\_DLBT1404074EN\_1.doc

#### 2. Changes

The following new features are added.

-The supported the card readers.

The Lodable drivers are common with bizhubC3850. Please refer to DL's.

| AU-201  | FeliCa TypeA2 FCF_C |               |
|---------|---------------------|---------------|
|         | FeliCa TypeA2 FCF_G |               |
|         | FeliCa TypeA2 IDm   |               |
|         | FeliCa TypeA2 SSFC  |               |
|         | FeliCa TypeA2 TypeA | DLBT1401710EN |
| AU-201H | Prox                |               |
| AU-202H | iClass              |               |
| SCL-010 | IDm                 |               |
|         | TypeA               |               |
| Y-Soft  |                     | DLBT1400802EN |

#### 3. Restrictions

- <Planned to be supported in MR of around the middle of Oct,2014.>
- -If you save a document composed of more than 100 pages and print more than one copy later, the job will stop in the middle of printing. This problem is seen when printing the following jobs:

  Store Job, Print and hold, Secured Job, Proof then Print, ID & Print
- -When the machine wakes up from Deep Sleep mode with a USB flash memory connected to it, sometimes "USB CONN ERR" is displayed and printing cannot be done. (This does not occur if a USB flash memory is connected during Deep Sleep mode. It occurs when the machine enters Deep Sleep mode with a USB flash memory connected and wakes up later.)
- -If you specify 2W or below as power consumption for Deep Sleep mode (development goal), sometimes the machine does not wake up.

(Remove the function that sets the power consumption to 2W or below.)

#### 4. Programs to be applied at the same time

There is no specific program to be applied with this firmware. However, using with the latest version programs is recommended.

#### 5. How to install

Please refer to "J. Rewriting of firmware ", Service Manual.

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<sup>\*</sup> Company names and product names in this document are the registered trademarks for respective companies. Copyright(C) 2014 KONICA MINOLTA, INC.

CSES ID-No. DLBT1408853EN00

Title: KONICA MINOLTA Universal Print Driver Ver.2 Maintenance Release 5 (PCL/Version 2.50.0.0)

2014/05/30

#### 1. Release version and download file name

The newly released program version and download file name are as follows.

When a Universal Printer Driver which is older than this version (v2.50.0.0) is installed in your PC, if this version (v2.50.0.0) is updated by Add install, the Printing preferences and the Printer properties will not be displayed correctly. If this version (v2.50.0.0) is installed by the installer (Setup.exe), the following message will be displayed and this version (v2.50.0.0) cannot be installed.

"The printer driver is not a target for update."

Please be sure to install this version (v2.50.0.0) after deleting the older version.

#### [Release version]

| 1 | Program Name                    | Current Ver. | New Ver.  | Language                             | Install Type |
|---|---------------------------------|--------------|-----------|--------------------------------------|--------------|
|   | KONICA MINOLTA<br>Universal PCL | v2.40.0.0    | v2.50.0.0 | JA/EN/FR/IT/DE/ES/<br>KO/ZH-CN/ZH-TW | Exe type     |

| Model   | Child Driver Version | Note                          |
|---|----------------------|-------------------------------|
| Baseline *1   | 1.0.1.UPD_05         |                               |
| KONICA MINOLTA 163/211  |                      |                               |
| KONICA MINOLTA A3 common *3                                   | 1.0.1.UPD_03         |                               |
| KONICA MINOLTA mc8650   |                      |                               |
| KONICA MINOLTA A4 common *2                                   | 1.0.0.UPD_02         |                               |
| KONICA MINOLTA C30P/C31P                                      |                      |                               |
| KONICA MINOLTA C20  |                      |                               |
| KONICA MINOLTA C20P   |                      |                               |
| KONICA MINOLTA 40P  |                      |                               |
| KONICA MINOLTA mc5550/mc5570                                  |                      |                               |
| KONICA MINOLTA mc5650/mc5670                                  |                      |                               |
| KONICA MINOLTA mc4650   |                      |                               |
| KONICA MINOLTA pp.4650/pp.5650                                |                      |                               |
| KONICA MINOLTA pp4650/pp5650<br>KONICA MINOLTA mc5450         |                      |                               |
| KONICA MINOLTA 111C3430                                       | 3.0.2.UPD_03         |                               |
| KONICA MINOLTA 500/420/360                                    | 2.0.1.UPD 03         |                               |
| KONICA MINOLTA 750/600  | 3.1.0.UPD_03         |                               |
| KONICA MINOLTA 750/000  KONICA MINOLTA 751/601 (1.0.3.UPD_03) | 1.0.3.UPD_03         | MFP FW ver.19 series or older |
| ,   |                      |                               |
| KONICA MINOLTA 751/601 (2.0.0.UPD_03)                         | 2.0.0.UPD_03         | MFP FW ver.20 series or later |
| KONICA MINOLTA C650/C550/C451                                 | 6.3.0.UPD_04         |                               |
| KONICA MINOLTA C450/C450P/C351                                | 1.0.0.UPD_04         |                               |
| KONICA MINOLTA C352/C352P/C300                                | 1.0.1.UPD_03         |                               |
| KONICA MINOLTA C250/C250P                                     | 1.1.1.UPD_04         |                               |
| KONICA MINOLTA C252/C252P                                     | 1.1.1.UPD_03         |                               |
| KONICA MINOLTA C353/C253/C203                                 | 6.3.0.UPD_04         |                               |
| KONICA MINOLTA 350/250/200                                    | 1.1.2.UPD_03         |                               |
| KONICA MINOLTA 362/282/222                                    | 1.1.0.UPD_03         |                               |
| KONICA MINOLTA  | 3.0.16.UPD_03        |                               |
| C652(DS)/C552(DS)/C452  |                      |                               |
| KONICA MINOLTA C360/C280/C220                                 | 3.0.16.UPD_05        |                               |
| KONICA MINOLTA 423/363/283/223                                | 1.1.2.UPD_03         |                               |
| KONICA MINOLTA 652/602/552/502                                | 1.1.0.UPD_05         |                               |
| KONICA MINOLTA C35  | 1.1.2.UPD_03         |                               |
| KONICA MINOLTA C35P/mc4750                                    |                      |                               |
| KONICA MINOLTA C25  | 4.0.0 LIDD .0.1      |                               |
| KONICA MINOLTA 20   | 1.0.0.UPD_04         |                               |
| KONICA MINOLTA 20P  | 1.0.0.UPD_04         |                               |
| KONICA MINOLTA 42/36 (EU/JP)                                  | 1.0.0.UPD_01         |                               |
| KONICA MINOLTA 42/36  | 2.0.0.UPD_02         |                               |
| KONICA MINOLTA C754(e)/C654(e)                                | 4.1.0.UPD_01         |                               |

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| KONICA MINOLTA 195/215/235              | 1.0.0.UPD_06 |  |
|---|--------------|--|
| KONICA MINOLTA                          | 4.1.0.UPD_01 |  |
| C554(e)/C454(e)/C364(e)/C284(e)/C224(e) |              |  |
| KONICA MINOLTA 754(e)/654(e)            | 4.1.0.UPD_01 |  |
| KONICA MINOLTA 4700P/4000P/3300P        | 1.0.9.UPD_07 |  |
| KONICA MINOLTA                          | 4.1.0.UPD_01 |  |
| 554e/454e/364e/284e/224e                |              |  |
| KONICA MINOLTA C3850/C3350              | 1.3.1.UPD_03 |  |
| KONICA MINOLTA 4020/3320                | 1.2.0.UPD_05 |  |
| KONICA MINOLTA 4750/4050                | 1.1.1.UPD_02 |  |
| KONICA MINOLTA 25e                      | 1.0.0.UPD_04 |  |
| KONICA MINOLTA C3100P                   | 1.1.2.UPD_03 |  |
| KONICA MINOLTA C3110                    | 1.0.0.UPD_03 |  |

<sup>\*1</sup> Baseline: Common driver (mc1650/2550/7440/7450/7450II/C10P, etc) You can select 163/211 from Model Name.

[Download file name]
KM\_UniversalDriver\_pcl\_v2.50.0.0\_x86.zip
KM\_UniversalDriver\_pcl\_v2.50.0.0\_x64.zip
PRI\_DLBT1408853EN\_0.doc

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<sup>\*2</sup> KONICA MINOLTA A4 common: KM Common driver (pagepro Series, magicolor (A4))
You can select C30P/C31P/C20/C20P/40P/mc5550/mc5570/mc5650/mc5670/mc4650/mc4695MF/pp4650/pp5650/mc5450 from Model Name.

<sup>\*3</sup> KONICA MINOLTA A3 common: KM Common driver (bizhub Series (A3), mc8650, etc) You can select mc8650 from Model Name.

<sup>\*4</sup> When trying to connect to a device from Device Selector window and individual child driver is not contained, KM common driver may be used. In case the child driver for each model, KM common driver can not be used, the common driver (Baseline) will be selected.

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| [Supported OS]   |      |  |  |  |
|--|------|--|--|--|
| os   | WHQL |  |  |  |
| Windows Server 2003, Standard Edition                            |      |  |  |  |
| Windows Server 2003, Enterprise Edition                          |      |  |  |  |
| Windows Server 2003 R2, Standard Edition                         |      |  |  |  |
| Windows Server 2003 R2, Enterprise Edition                       | Yes  |  |  |  |
| Windows Server 2003, Standard x64 Edition                        | 162  |  |  |  |
| Windows Server 2003, Enterprise x64 Edition                      |      |  |  |  |
| Windows Server 2003 R2, Standard x64 Edition                     |      |  |  |  |
| Windows Server 2003 R2, Enterprise x64 Edition                   |      |  |  |  |
| Windows Vista Home Basic*  |      |  |  |  |
| Windows Vista Home Premium*                                      |      |  |  |  |
| Windows Vista Ultimate*  | Yes  |  |  |  |
| Windows Vista Business*  |      |  |  |  |
| Windows Vista Enterprise*  |      |  |  |  |
| Windows Server 2008 Standard*                                    | Vaa  |  |  |  |
| Windows Server 2008 Enterprise*                                  | Yes  |  |  |  |
| Windows Server 2008 R2 Standard                                  | Vaa  |  |  |  |
| Windows Server 2008 R2 Enterprise                                | Yes  |  |  |  |
| Windows 7 Home Basic*  |      |  |  |  |
| Windows 7 Home Premium*  |      |  |  |  |
| Windows 7 Professional*  | Yes  |  |  |  |
| Windows 7 Enterprise*  |      |  |  |  |
| Windows 7 Ultimate*  |      |  |  |  |
| Windows 8 *  |      |  |  |  |
| Windows 8 Pro*   |      |  |  |  |
| Windows 8.1 *  |      |  |  |  |
| Windows 8.1 Pro*   |      |  |  |  |
| Windows Server 2012 Standard                                     | Yes  |  |  |  |
| Windows Server 2012 Datacenter                                   | 103  |  |  |  |
| Windows Server 2012 Essentials                                   |      |  |  |  |
| Windows Server 2012 R2 Standard                                  |      |  |  |  |
| Windows Server 2012 R2 Datacenter                                |      |  |  |  |
| Windows Server 2012 R2 Essentials                                |      |  |  |  |
| * Both 32bit (x86), 64bit (x64)                                  |      |  |  |  |
| Support the following operation environments.                    |      |  |  |  |
| - Windows Server 2003 / 2008 Cluster Server Service (32/64 bit)  |      |  |  |  |
| - Windows Server 2008 R2 / 2012 / 2012 R2 Cluster Server Service |      |  |  |  |
| - Citrix Presentation Server 4.5                                 |      |  |  |  |
| - Citrix XenApp 5.0/6.0  |      |  |  |  |
| - Terminal Services  |      |  |  |  |
| - Remote Desktop   |      |  |  |  |
| - Terminal Services Easy Print                                   |      |  |  |  |

- Terminal Services Easy Print
- Remote Desktop Easy Print

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#### 2. What changed

2-1. The following issue is modified in this version.

- 1. Following Child drivers are added.
  - KONICA MINOLTA C3100P
  - KONICA MINOLTA C3110
- 2. Support the following models.
  - KONICA MINOLTA C3100P
  - KONICA MINOLTA C3110
  - KONICA MINOLTA C754e/C654e,C554e/C454e/C364e/C284e/C224e,754e/654e,554e/454e/364e/284e/224e Function Version 5
  - KONICA MINOLTA 4750/4050 Ver.A6F730G0236-999
  - KONICA MINOLTA C3850/C3350 Ver.A3GN30G0206-999
- 3. Multi-Language is supported.
- 4. When installing the driver by Add install, Device Selector is not shown.

#### 3. Restrictions

- 1. The message "Operation could not be completed." may be displayed when you open the Device Selector window from Printing Preferences...(document property) and then, close with Cancel button.
- 2. With the Windows Server 2003:
  - 1) To open the help topic, "?" button on the Upper right on the driver dialog does not work.
  - 2) To open the help topic, the right button click menu of the mouse does not work.

Note: Windows Vista does not have above two features. It is the restriction from OS.

Note: To open help topic, please click help button on the driver dialog.

Apply to the following models:

KONICA MINOLTA C450/C450P/C351 KONICA MINOLTA C352/C352P/C300 KONICA MINOLTA C250/C250P KONICA MINOLTA C252/C252P KONICA MINOLTA 350/250/200

KONICA MINOLTA 500/420/360

KONICA MINOLTA 750/600

3. There are following restrictions under IPv6 connection.

<The case that is used linklocal address>

The driver cannot acquire the device information but, Printing is possible.

Use IPv4 to acquire the device information.

<Connecting to MFP with an IPv6 global address does not work.>

Please connect with IPv4 address or please use IPv6 link local address when it is not necessary to be retrieved the device information.

Apply to the following models:

KONICA MINOLTA C650/C550/C451

KONICA MINOLTA C353/C253/C203 KONICA MINOLTA C450/C450P/C351

KONICA MINOLTA C352/C352P/C300

KONICA MINOLTA C250/C250P

KONICA MINOLTA C252/C252P

KONICA MINOLTA 350/250/200

KONICA MINOLTA 500/420/360

KONICA MINOLTA 750/600

**KONICA MINOLTA 751/601** 

When printing the job from Microsoft PowerPoint2007, "Remove White Background" does not work in the Universal Print Driver.

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5. If you print the job from Microsoft Excel when selecting the destination printer on the Device Selector and using it, paper size and printing direction that were saved in Excel file may not be reflected.

#### Countermeasure

Please select Excel file >Print >Properties and perform setting again.

6. If you open "Properties" when using the Universal Print Driver under the following conditions, do not switch the application until the Device Selector is opened.

When the following sympton1 occurs, please close the Device Selector.

#### Condition:

32bit Application is installed on Windows 64bit OS.

#### Procedure/ Symptom

- 1) Open Print> Properties of 32bit application (ex. applicationA). After that, if you switch to another application (ex. applicationB), switched application (applicationB) does not respond.
- 2) If you close "Print Dialog" of 32bit application (applicationA) under the condition1, 32bit application (applicationA) does not respond.
- 7. Incorrect driver may be selected when trying to print on the same MFP with changing the driver like example below.

#### Occurring case

- The firmware for the MFP updated.
- When you selected the driver manually, and the driver manually selected was the different one from the driver listed on the network search.

#### Occurring PDL

**PCL** Driver

#### Countermeasure

User who operates the MFP performs Logoff, and login to the MFP again.

8. When printing the file has a large image from KONICA MINOLTA 20/20P PCL Child Driver, the Black line appears on the image.

#### Countermeasure

Use KONICA MINOLTA 20/20P PS Driver or KONICA MINOLTA 20/20P PCL Driver of product.

- 9. In Dynamic Mode, even if change the port from the Device Selector screen, the port may not be changed when opening Printer properties. (Specification for OS)
- 10. On Microsoft Publisher 2007, there is a restriction as below.

After installing Universal Print Driver, if you never use it and print the job from Dynamic Mode, Printing Preferences is not reflected in the printing result.

#### Countermeasure

- 1) Close Microsofot Publisher 2007.
- 2) Open Printing Preferences of Universal Print Driver from "Printer and Faxes".
- Select the Device from the Device Selector screen and click "OK" button in displayed Printing Preferences screen.

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- 11. In Citrix Presentation Server 4.5/Citrix XenApp 5.0, there are restrictions as below.
  - Dynamic Mode is not supported. Please use Traditional Mode.
  - When installing Universal Print Driver to Client PC from Traditional Mode, if Admin Privilege User opens "Printing Preferences" or "Properties" of AutoCreate Driver, the Device Selector screen is started. (Specification for Presentation Server 4.5/ Citrix XenApp 5.0)

It is possible to print the job if select output port and child driver from started Device Selector screen.

If any user except Admin Privilege user performs this, this symptom does not occur.

- If perform the following operation, cannot close the Properties screen of Citrix Universal Print Driver. (Specification for Universal Print Driver of Citrix)
- 1) Create the printer icon from Traditional Mode on the Client PC.
- 2) Connect to the Citrix.
- When open the Properties of AutoCreate Printer icon from "Printer and Faxes", the Properties of Citrix Universal Print Driver is displayed.
- 4) If click "Local Printer Settings" button, the Properties of KONICA MINOLTA Universal Print Driver is displayed. Click "OK".
- Even if click OK or Cancel from the Properties of Citrix Universal Print Driver, the Properties screen is not closed.

If open the Properties from the application, this symptom does not occur.

#### Countermeasure

- Please open the Properties setting from the printer icon that created from Traditional Mode of Client PC and perform setting before connecting to the Citrix.
- 12. When using Dynamic Mode, there is a restriction as below.

When changing the Device from the Device Selector screen, Printing Preferences setting may not go back to the default.

#### Countermeasure

Please select "Default Setting" from the Favorite Setting and set Printing Preferences to the Default.

#### Occurring PDL

PCL Driver

13. Any user except the user installed Universal Print Driver or Admin Privilege User cannot open the Device Selector screen.

When open the Device Selector screen, please use "Run as administrator".

#### Occurring OS

- WindowsVista
- Windows Server 2008
- 14. In CorelDRAW Graphics Suite, if select "Collate", it does not work.

#### Countermeasure

- 1) Select "File"> "Print".
- 2) Click "References" button and select "Printer Preferences" of Driver.
- 3) Select "Collate" of "Printer Preferences".

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- 15. When performing the operation below, the following symptom may occur depending on the PC.
  - Right-click the printer icon that added from Traditional Mode and click "Properties". If perform this operation continuously, the following symptom may occur.
  - Multiple Properties screens may be opened.
  - Abnormal end of Explorer may occur.
  - In Dynamic Mode, after selecting the Device from the Device Selector screen, right-click the driver and click "Properties" before Properties screen is displayed.
     If perform this operation continuously, the following symptom may occur.
  - Multiple Properties screens may be opened.
  - Abnormal end of Explorer may occur.
  - -If click "Printer Preferences" of General Tab many times, the following symptom may occur.
  - Multiple Properties screens may be opened.
  - Abnormal end of Explorer may occur.

#### Countermeasure

Close all Properties/Printing Preferences screens and open them again.

When abnormal end of Explorer occurs, perform log off and log on.

16. If "Share the Printer" is selected and the printer icon is created under the following setting, it fails to create the printer icon. (Restriction of OS)

Control Panel > Network and Sharing Center > Change advanced sharing settings > File and Printer sharing "Turn off file and printer sharing"

Please select "Turn on file and printer sharing"

#### Occurring OS

- Windows Vista
- Windows Server 2008
- Windows 7
- 17. In Terminal Service/ Remote Desktop, there are restrictions as below.
  - <TS Easy Print / RD Easy Print>
  - When printing the job from Microsoft PowerPoint, "Remove White Background" does not work.
  - When printing the job from Microsoft Excel, "Excel Job Control" does not work.
  - "Use Printer Fonts" does not work.
  - <Terminal Service/ Remote Desktop (traditional Printer Redirection)>
  - The user who is not allowed installation of printer driver on OS security can not use Universal Print Driver.
  - If Admin Privilege User opens "Printing Preferences" or "Properties" of printer icon created by Traditional Mode, the Device Selector screen is started. Please select the same model as the printer icon that you are trying to open in the Device Selector screen and close it. And then open "Printing Preferences" or "Properties" of printer icon.
  - If you never open printing preferences of the printer icon and printing the job after creating printer icon by Traditional Mode, the job is not printed out.
- 18. If Properties is opened by "Run as administrator" on Windows Vista, Multiple Device Selector screen can be opened. (Restriction of OS)
- 19. In "Add Printers from Printer List" function, there are restrictions as below.
  - The following symptoms may occur when PC is not rebooted after deleting the created printer icon.

The printer icon may be created by the deleted model name under the following situation.

- MFP/Printer A and MFP/Printer B is the same IP address.
- MFP/Printer A and MFP/Printer is different model.
- 1. Delete the printer icon for MFP/Printer A.
- 2. Create the printer icon for MFP/Printer B.

Result: The created printer icon name is MFP/Printer A

- The spooler screen may be displayed while creating printer icon.

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- 20. There is following restrictions under Point and Print environment when the added watermark which is not shared and it is set as default on the Server.
  - The watermark below the added watermark on the Server is not reflected on client.
- 21. When the Spin button is clicked continuously, the Spin button may not be displayed.
- 22. If the printer icon is created by Traditional Mode using "Network Search" under the following situation, the Child driver is not selected correctly. (Restriction of OS)
  - The printer icon of MFP/Printer with the same IP address and the same Device Name (Device Name in Machine Setting) exist on the network is created again after create the printer icon.
- 23. The following symptom occurs under Point and Print environment. (Restriction of OS)
  - "It could not access to the printer" or "Operation could not be completed." is displayed and Property of printer icon on client can not be opened under the following situation.
  - OS: Windows 7
  - UPD Version: v1.0.0.0/1.2.0.0/1.3.0.0/1.10.1.0/1.11.1.0
    - And updating to this version from above version.
  - ":" + "character of A to F" is used for printer icon name.
- 24. Admin Privilege User except Built-in administrator may not be able to open the Device Selector screen on Server 2012.

If the Device Selector screen can not be opened, please apply the following procedure.

- 1) Open the Print server properties.
- 2) Click "Add" button in Security Tab and add Admin Privilege User.
  - \*If "Add" button is grayed out, please select Security Tab after click "Change Form settings" button in Forms Tab.
- 3) Enable "Allow" of the followings for the added Admin Privilege User.
  - Manage Printers
  - View Server
  - Manage Server
- 25. When you select "Share the Printer" of [Add this Printer to my Printers folder] of Device Selector and try to add the printer icon on Windows Vista, "It fails to share the printer" is displayed and the icon cannot be added.

#### Countermeasure

Please right-click on the printer icon and select "Run as administrator" to open Device Selector.

#### 4. Important Notice

1. The reproduction of bizhub20 /20P picture is prohibited.

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#### 5. How to install/ uninstall program

When a Universal Printer Driver which is older than this version (v2.50.0.0) is installed in your PC, if this version (v2.50.0.0) is updated by Add install, the Printing preferences and the Printer properties will not be displayed correctly. If this version (v2.50.0.0) is installed by the installer (Setup.exe), the following message will be displayed and this version (v2.50.0.0) cannot be installed.

"The printer driver is not a target for update."

Please be sure to install this version (v2.50.0.0) after deleting the older version.

#### 5.1 How to install

a) When using Installer,

If your PC is 32-bit environment, please use "UPDSetup.exe". If your PC is 62-bit environment, please use "UPDSetup64.exe". And follow the onscreen wizard to do installation.

- \* In the following environment, cannot use the Installer. Please refer to c) or d).
  - Microsoft Cluster Server
  - Citrix Presentation Server 4.5
  - Citrix XenApp 5.0/6.0
- b) When install manually

Please perform installation using Add Printer Wizard in Windows.

- c) When installing Universal Print Driver in Microsoft Cluster Server.
  - c-1) In the node that creates Cluster, access to the printer folder of Virtual Server from Active Node.
  - c-2) Install Universal Print Driver using add Printer Wizard.
    - \* About the destination port, please specify the optional port.
    - \* Please select "Do not share this printer".
    - \* In Add Printer Wizard, cannot print the test page.
  - c-3) Open Properties of Universal Print Driver on the printer folder and display the Device Selector screen.
  - c-4) Select the device and create the printer icon from Traditional Mode.
    - \* Using Dynamic Mode is not supported in the Cluster Server.
  - c-5) Close Properties of Universal Print Driver from "Cancel" button.
  - c-6) When using Universal Print Driver in Point and Print, set the printer icon that created at C-4) to "share this printer".
- d) When installing Universal Print Driver to Citrix Presentation Server 4.5, Citrix XenApp 5.0/6.0
  - d-1) Please perform installation using Add Printer Wizard in Windows.

#### Installation Note

When performing installation using Add Printer Wizard in Windows, "Do you want to print a test page?" is displayed while installing Universal Print Driver. Output port is not decided at this point. Therefore, if select "Yes", the test page is not printed out.

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#### 5.2 How to un-install Universal Print Driver

a) When uninstall using Uninstaller

Please start up "Uninstaller" from any of the following and follow the instructions of dialogue box to uninstall the driver.

- "Start" menu> "All Programs">"KONICA MINOLTA">"Universal PCL"
- "Control Panel"> "Add or Remove Programs"> "Remove" button of "KONICA MINOLTA Universal PCL"

#### b) When uninstall manually

If uninstall the driver completely, please perform the following procedure.

When uninstalling UPD, if the folders or files are hidden, please change the setting to indicate the files and folders.

- 1. Delete the printer icon, (for all OS)
  - From [Printers (and Faxes)] folder, right click [KONICA MINOLTA Universal PCL] icon and select [Delete].
  - If you registered the printer icon from [Add this Printer to my Printers folder] of Device Selector, please delete all registered printer icons.
  - After deleting all icons related to Universal Print Driver, go to [file] [Server Properties] [Drivers] tab and Remove [KONICA MINOLTA Universal PCL].
- 2. Delete entries from the Registry. (for all OS)
  - [Start] button [Run...] input "regedit" [OK], and start the [Registry Editor].
  - Please delete all the following keys and each sub-key by the Registry Editor. (Differ in PCL and PS.) (The existing registry key depends on the version of installed UPD.)

HKEY\_CURRENT\_USER\Software\KONICA MINOLTA\KONICA MINOLTA Universal PCL

3. Please delete the following folders.

<32 bit OS (Windows XP(x86), Server 2003(x86), Vista(x86), Server2008(x86), 7(x86))> C:\WINDOWS\system32\spool\drivers\w32x86\konica\_minoltauniverfe33 <64 bit OS (Windows XP(x64), Server 2003(x64), Vista(x64), Server2008(x64), 7(x64), Server2008R2)> C:\WINDOWS\system32\spool\drivers\x64\konica\_minoltauniverfe33

4. Delete the UPD child drivers.

-OS might grip the file. Please delete the following folders after restart PC.

<32 bit OS (Windows XP(x86), Server 2003(x86), Vista(x86), Server2008(x86), 7(x86))> C:\KMUPDcache\x86\PCL <64 bit OS (Windows XP(x64), Server 2003(x64), Vista(x64), Server2008(x64), 7(x64), Server2008R2) C:\KMUPDcache\x64\PCL

#### 6. How to check version information

- 1. Open "Printers and Faxes".
- 2. Select "KONICAMINOLTA Universal PCL".
- 3. Right click on the icon and select "Properties".
- 4. Click "Details" button.
- 5. Click "Option" button.
- 6. Click "Version Information".

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<sup>\*7</sup>z.dll that is a part of 7-Zip program is included in this printer driver.

<sup>7-</sup>Zip is provided under the license of GNU LGPL.

<sup>7-</sup>Zip can be obtained from www.7-zip.org.





#### SOLUTIONS SUPPORT DIVISION

**Bulletin Number 7689** 

**Date:** 11/05/10

From: SSD

Subject: New Enhancements to Warranty Solution

Service

Communications: 128

In our continuing efforts to simplify our warranty claim process, Konica Minolta Service Operations is pleased to inform you that several new functional enhancements have been implemented to the KMBS Warranty Solution.

Specifically, we have modified the online warranty claim form with a "*Get Invoice*" option to make it easier to submit claims to KMBS. This enhancement offers Dealer Users new functionality that auto-populates the Konica Minolta invoice number associated with the product serial number as entered for an original part warranty claim. This feature is available for all standard and 3-Year Program warranty claims for advance-exchange or credit as submitted in mykonicaminolta.com.

As of today, KMBS Service Operations has made several other enhancements to the online Warranty Solution and they are detailed below.

The changes are being implemented based on feedback received from our Dealer Channel users. KMBS Service Operations welcomes our Business Partners continued feedback on our warranty programs in order for us to provide the proper tools for a successful partnership.

Please note that replacement part(s), and supply items submitted as Yield & Performance Protection claims, are not enabled under the "*Get Invoice*" enhancement.

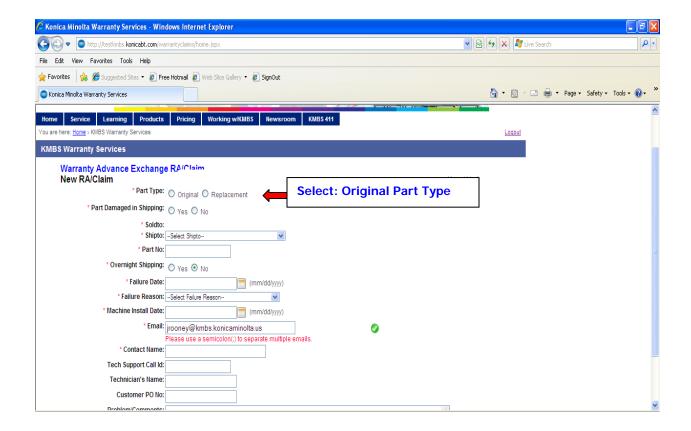
Thank you for your continued support.

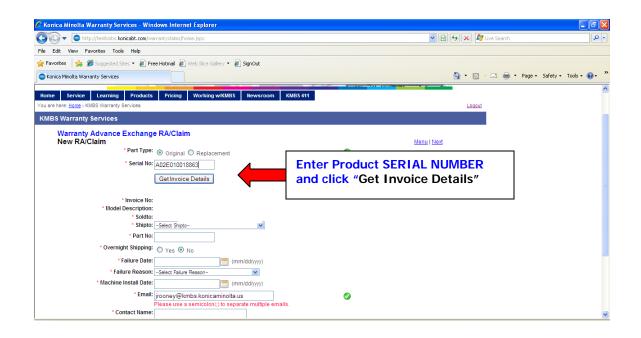
**Service Operations Konica Minolta Business Solutions, Inc.** 

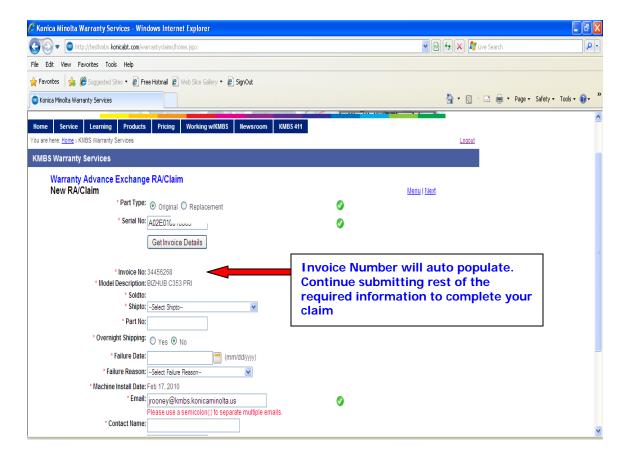
#### 1. Get Invoice

When you are submitting a warranty claim **for an original part failure** on a unit under warranty you will no longer have to provide an invoice number. When you select original part on the claim form and enter the product serial number, the invoice will be auto populated.

Please note: The MAP Account radio button has been removed.

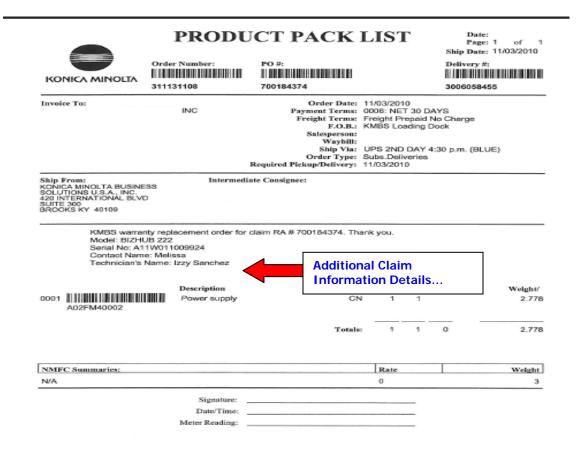






#### 2. Additional Text added to Packing Slip

In addition to the RA Number currently displayed on the KMBS Packing List of your Warranty Parts Shipment, you will now find the *Model, Serial Number, Contact Name and Tech Name* also printed on the packing list. This should assist you in identifying and distributing warranty parts to your technicians. This information will also be printed on the KMBS invoice and credit memos.



## 3. Outbound Order Number and Core Return Address Added to Warranty Claim Notification eMail Messages

In order to assist in tracking your replacement warranty parts, Service Operations has added the **KMBS Sales Order number** to the e-mail notifications from the Warranty Solution. Further, the defective core return KMBS Ship-To address has also been added to all emails for easy reference.

#### Example:

#### **Dear KMBS Business Partner:**

We have received your warranty claim RA # 700184378 with the following information:

Claim Type: Warranty Advance Exchange RA/Claim

**Bill to KMBS Customer Acct No: 12546** 

KMBS Customer Name: KMBS Address: 101 Williams Drive

Ship to Acct: 25489

Outbound Sales Order: 3000031115 Model Description: BIZHUB 222 Serial No: A11W011000000

Part Type: Original Part No: A02FM40002

Part Description: Power supply

**Overnight Shipping: No** 

Part Damaged in Shipping: No SSD T/S - CRC Ticket No.:

Failure Reason: Mechanical Failure

Problem/Comments: Please contact KMBS Service Operations at ServiceOps1@kmbs.konicaminolta.us for questions on this claim.

All warranty, YPP, FOC, and Special Program Core returns must be shipped to:

KMBS Warranty Recovery Center 31 Elkay Drive Chester, NY 10918

Please direct any questions on these new warranty enhancements to the Service Operations Team at <a href="mailto:serviceops1@kmbs.konicaminolta.us">serviceops1@kmbs.konicaminolta.us</a>. Thank you.

<sup>\*\*</sup> Please do not reply to this message. \*\*



## **TECHNICAL EDUCATION BULLETIN**

Solutions Support Division

Bulletin #: 9302 Date: 06/02/14

**Subject:** bizhub C3100P Technical Training Announcement

**Technical Education: 426** 

The Technical Training and Development Group of Konica Minolta Business Solutions U.S.A., Inc. is pleased to announce Web Based Technical Training for the bizhub C3100P.

The bizhub C3100P is a full color A4 (letter-legal size) printer that prints at up to 32 ppm and has a small footprint, making it an equally great fit for a home office or the executive corner office. And, with its optional support for PSES and IC card authentication, the bizhub 3100P is an excellent addition to fleets that include bizhub MFPs as part of one unified experience.

The web based technical training is provided in the form of a learn track and consists of two modules and an Exam.

- bizhub C3100P Engine WBT
- bizhub C3100P Controller WBT
- bizhub C3100P Certification Exam

It should take approximately 3 hours to complete the training.

To register for the bizhub C3100P Technical (WBT) learn track:

- 1. Log in to MyKonicaMinolta.com
- 2. Click on the Learning Tab
- 3. Enter "bizhub C3100P" in the search box located in the upper right hand corner and click Search
- 4. Click on the register button next to 'bizhub C3100P Technical (WBT)' and follow the on-screen instructions

Managers can also use the Learn Track Registration option within the Reporting / Approvals Menu to register their employees.

Please email <u>techtrain@kmbs.konicaminolta.us</u> or call (860) 683-2402 Ext. 2198 for questions related to Technical Training.



# TECHNICAL BULLETIN

Solutions Support Division

Bulletin #: 9331 Date: 06/27/14

Subject: Startup Parts

**bizhub C3100P**: 001

The following table contains the recommended startup items for the bizhub C3100P model. Multiply the quantities recommended by the number of machines in the field to aid in determining your overall stocking level.

Parts and supplies can be ordered using standard ordering procedures.

### bizhub C3100P Startup Parts List



For replacement procedures, refer to the Field Service Manuals.

| Section                           | Description                     | Item No.   | Qty. | Replacement Interval |
|-----------------------------------|---------------------------------|------------|------|----------------------|
| Body                              |                                 |            |      |                      |
| Processing section <sup>1</sup>   | Imaging unit (C), IUP23C        | A7330KF    | 1    | 30,000               |
| J                                 | Imaging unit (M), IUP23M        | A7330EF    | 1    | 30,000               |
|                                   | Imaging unit (Y), IUP23Y        | A73308F    | 1    | 30,000               |
|                                   | Imaging unit (K), IUP23K        | A73303F    | 1    | 30,000               |
|                                   | Toner cartridge (C), TNP50C     | A0X5234    | 1    | 6,000                |
|                                   | Toner cartridge (M), TNP50M     | A0X5334    | 1    | 6,000                |
|                                   | Toner cartridge (Y), TNP50Y     | A0X5434    | 1    | 6,000                |
|                                   | Toner cartridge (K), TNP50K     | A0X5134    | 1    | 6,000                |
| Transfer section <sup>1</sup>     | Transfer belt unit              | A1480Y1    | 1    | 100,000              |
|                                   | 2 <sup>nd</sup> transfer roller | A1480Y2    | 1    | 100,000              |
|                                   | Waste toner bottle              | A1AU0Y1    | 1    | 30,000               |
| Paper feed section <sup>2,3</sup> | Tray 1 feed roller              | 4138303202 | 1    | 300,000              |
|                                   | Tray 1 separation roller        | 4658015106 | 1    | 300,000              |
|                                   | Manual tray feed roller         | 4138303202 | 1    | 300,000              |
|                                   | Manual tray separation roller   | 4658015106 | 1    | 300,000              |
| Fusing section <sup>1</sup>       | Fusing unit                     | A148010    | 1    | 100,000              |

<sup>1.</sup> Supply item. Replacement intervals are approximate, based upon usage characteristics including print density and coverage.

<sup>2.</sup> Replace all rollers in this group at the same time.

<sup>3.</sup> Items intended for replacement by technician. All other items are intended for consumer replacement.



## **SERVICE COMMUNICATION BULLETIN**

Solutions Support Division

Bulletin #: 9140 Date: 02/24/14

**Subject:** SSD Mobile Access: It's Not Just for Smartphones

Service Communication: 171

In response to a number of inquiries, we are pleased to announce that the hugely popular SSD Mobile Access is not just for mobile devices. You can access all of the features of Mobile Access from any desktop or laptop computer – just like you would from a smartphone.

Using a computer gives you the advantages of working with larger screen real estate, making it even easier to see information at a glance, minimizing scrolling. And, of course, you can keep all of your other application windows running to help you maintain an efficient work environment.

SSD Mobile Access includes the following modules\*:

- ✓ Search the Knowledgebase
- ✓ Open Tickets /
   All Open Tickets (for Managers)
- ✓ MyKonicaMinolta

✓ Help

✓ Suggestions

✓ Warranty

✓ Mobile Manuals

✓ Schedule Me

✓ DSM Connect

√ vCare Search

- ✓ Contact Center Hold Times
- ✓ View Me

<sup>\*</sup> Access to all modules requires a valid login on MyKonicaMinolta.com. All Open Tickets is restricted to authorized managers. Modules are subject to change.



To reach SSD Mobile Access from a computer, simply point your browser to:

#### http://onyxweb.mykonicaminolta.com/kb

We suggest that you bookmark this location for easy future access.

*Note:* When using SSD Mobile Access from a computer, the heading is presented as "SSD Web Access". Although both modules provide access to the same information, the "mobile" version has been optimized to provide the best experience when using small screens typically found on smartphones and tablets.



## Service Communication Bulletin

**Solutions Support Division** 

Bulletin #: 8661 Date: 02/20/13

Subject: HTML version Service Manuals now accessible directly from MyKonicaMinolta.com

Service Communication: 161

Have you ever gotten frustrated by the time required to download a service manual just to answer a simple question? Or maybe, you have a lack of hard drive space and don't want to download manuals? What about referring to a manual that you have saved to your laptop, only to find out later that your version manual was out of date and the procedure has been updated or the setting changed?

Well, welcome to the future of service documentation for Konica Minolta Business Solutions, U.S.A., Inc.

Service Communications is pleased to announce that HTML version service manuals are now available from MyKonicaMinolta.com.

These HTML version manuals are optimized for access on laptops and PC's. They are accessed via MKM.com in the same manner as previous versions; pages can be viewed quickly without downloading; and since you are not required to save them locally, you never have to worry about versioning again! Let us take care of that for you!

Whenever you access HTML service manuals online you will quickly and easily have access to the latest version.

Now, for those of you that resist change or have the need to store files locally, rest assured that you still can – but beware of those versioning issues!

As a reminder, mobile version HTML manuals that are optimized for the small screens on smartphones, and similar devices are also available through the SSD Mobile Applications announced in Service Communications Bulletin #8107. To access Mobile Manuals, you must use the **Opera Mobile** browser, you must be logged in to **MKM.com** and you must point your browser to <a href="http://onyxweb.mykonicaminolta.com/kb">http://onyxweb.mykonicaminolta.com/kb</a>.



## **SERVICE COMMUNICATION BULLETIN**

Solutions Support Division

Bulletin #: 9214 Date: 04/15/14

**Subject:** One Stop Product Support - Improvements and Enhancements

Service Communication: 174

This bulletin supplements Bulletin #8277 dated 2/28/12, describing the many improvements to One Stop Product Support.

Since its introduction in February, 2012, the One Stop Product Support page has undergone many changes to make it easier to use and to provide access to a broader array of resources. As a result, One Stop has become much more of a single point of entry to obtain relevant information to help you support Konica Minolta products. Following are some of the most significant changes.

#### HOW DO YOU WANT TO FIND INFORMATION?

One Stop is designed to make it easy for you to find the information that you need. Understanding how One Stop is structured can help speed you to the resources that will best meet your needs.

#### Technical, by Model



If you are thinking about a particular model, you'll appreciate the new Search box.

If you know the model number, just type it – or a portion of it – into the **Quick Search** box. When you click the arrow or press enter, you'll be presented with a list of models that meets your criteria.

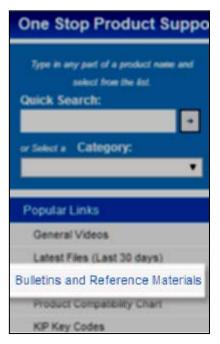
Click on the model, and then start selecting information from the pick lists that follow. This is a quick and easy way to narrow your search.



If you're not sure about the model, you can select a product Category, and then pick your model from the list presented.

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#### Technical and More, by Type of Information



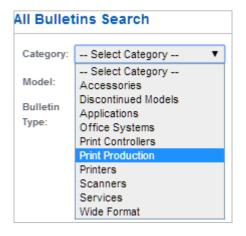
A new menu item gives you express access to the complete library of **Bulletins and Reference Material**. Clicking this link, located on the left side of the screen, will take you to a page with two important sectors: Product Reference Materials, and All Bulletins Search.

#### **All Bulletins Search**

This selector guides you through Konica Minolta's extensive collection of bulletins – more than technical bulletins – to help you find just what you're looking for.

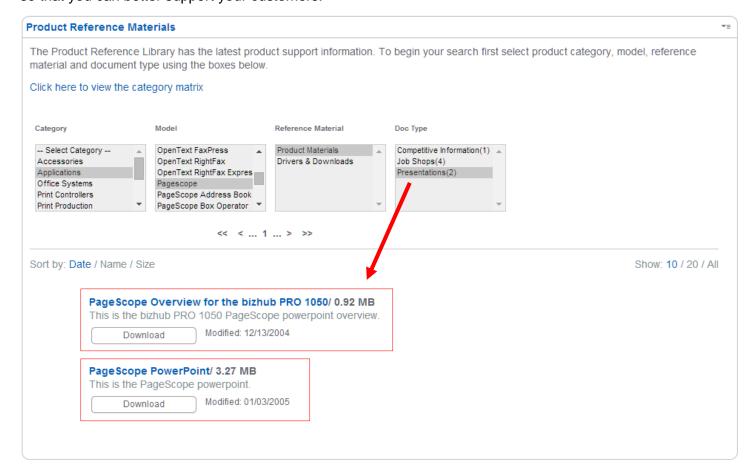
After narrowing your choices by product category and model (or even Application), you can choose from several Bulletin Types:

- General (Marketing)
- Technical
- Service Communication
- Training



#### **Product Reference Materials**

A wide variety of reference materials is available to help you understand Konica Minolta products and services so that you can better support your customers.



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Find what you're looking for by selecting the items in the Category, Model, Reference Material, and Doc Type fields. When you have drilled down, you will be presented with the final documents to choose from.

The Category Matrix shows the type of information available via this powerful information source.

| Environmental Declarations<br>Environmental Declarations  | Artwork & Marketing Posters Product Images & Logos Copy points Launch material price/resource lis Reviewer's tip sheet Web banner Ad mats / mailers Line Art Customizable Word Flyer | Competitive Info Competitive guides Side-by-Side competitive Competitive reports TCO Calculators  | Job Shops<br>All Job Shops                                      | Print Samples Digital print sample files Demo kits Banner Sample Files      |
|---|--|---|---|---|
| Spec & Config Sheets Configuration Sheets Specification Sheets Sell Sheets Data Sheets Specification & Installation Guide   | Any industry awards  | Brochures Business Solutions at a glance i-Option Sell Sheet XPS/DPWS Brochure Power for IT Prof. Brochure bizhub Office Brochure Product Brochures (all brochures that cross product | Case Studies & White Papers<br>Any White Papers<br>Case Studies | Presentations Product PowerPoint files (.ppt) Flash Multimedia Files (.swf) |
| Sales Tools All Media Guides Warranties Basic Operations FAQs Product and Sales Guide Distribution Data Sheet Release Notes | Manuals Installation Manuals Parls Catalogs User Guides Service Manuals Miscellaneous  |   |   |   |



## SERVICE COMMUNICATION BULLETIN

Solutions Support Division

Bulletin #: 9215 Date: 04/15/14

**Subject:** Successful Searching on MyKonicaMinolta.com

Service Communication: 175

It happens to all of us more often that we would like: You want to refer to a document that you know you saw sometime in the past, but you can't find it. Perhaps it involved pricing, or a revised technical procedure, or a policy. The question you ask yourself is, "Where did I see it?"

There is a very good chance that what you are looking for is available on MyKonicaMinolta.com. There is an enormous amount of data there for the taking. But actually finding the one thing you need can be a daunting task. It's possible to spend many minutes – even hours – trying to find a particular piece of information, like finding the proverbial needle in a haystack.

MyKonicaMinolta.com has a terrific SEARCH feature designed to help you find just what you need in a matter of minutes – or even seconds – to help you be more productive, make better decisions, and impress those around you. Use the explanation and examples below as a guide to help you look like a hero when it comes to finding information!

#### Where's the Search?

The Search box is located near the top right corner of the screen when you first logon to MyKonicaMinolta.com. Simply type in your search term and press Enter (or click the "Go" button).



By design, MyKonicaMinolta.com will search all of the sources listed on the menu bar: Sales, Marketing, Service, Learning, etc. and will show results based upon your login credentials.

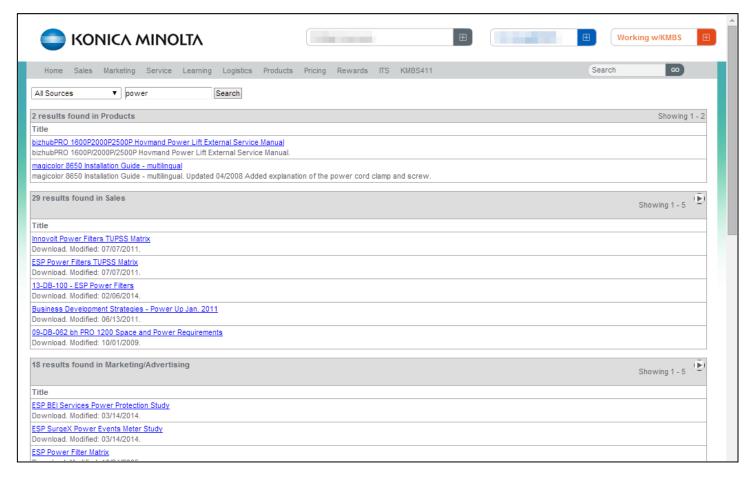
#### Search Tips

- **Use simple terms.** You usually will get the best results by using simple search terms. For example, searching for "spec" will give return more results than "specification".
- Be sure you spell things correctly. A simple mistake such as "protectin" instead of "protection" will make a very large difference in the search results.
- Complex terms may not get you what you want. If you're looking for information about surge
  protection, you will likely get better results with "power" instead of "power filter" or "power protection",
  because different document may use different terminology.

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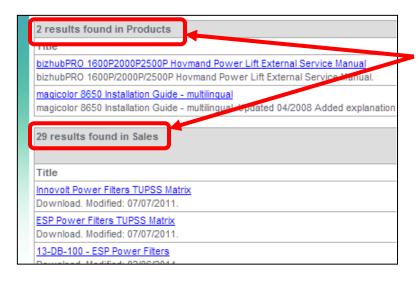
#### What do I get when I search?

When you do an initial search, you will see a screen that shows results from each of the sources, like this:



- Results are grouped by source. If there is nothing from a particular source that matches your search term, that source will say "No results found in xxxx."
- Simply click on a document link to open that document in a new tab or window (depending upon your browser settings).

#### How many results are there?



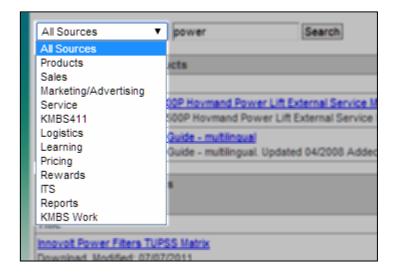
The number of results from each source is shown in the header for that source. Initially, up to 5 results will be displayed.

If more results are available, you can click the arrow at the right side of the header to display the next group.



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## Is there a faster way to browse results?



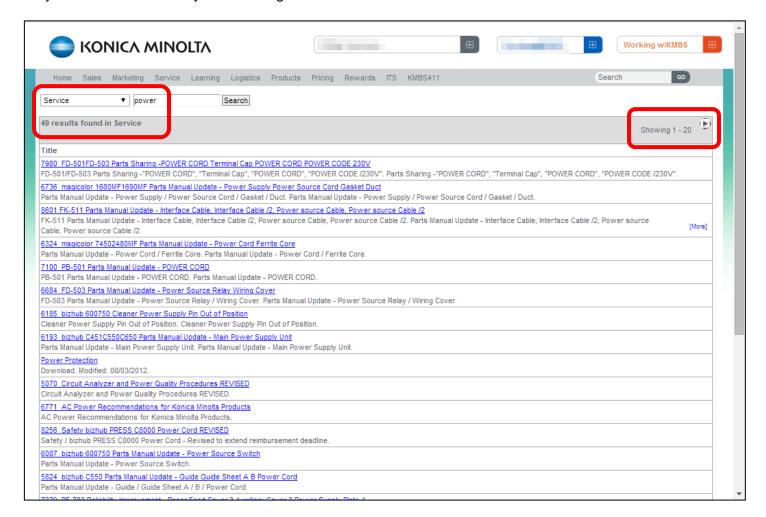
Based upon the original search results, you might decide that what you are looking for is mostly likely to be in just one of the sources.

If that's the case, you can confine your search to that one source by selecting it from the drop-down list.

Re-run your search after selecting the source.

You can repeat your search for different sources as often as you like.

When you search a single source (instead of All Sources), you will get a much larger list of documents that may have the information you're looking for.



In this example, the search for "power" was confined to the source "Service".

Depending upon your topic and your search terms, there may even be multiple pages of these results. However, this list can be much faster to peruse than the short 5-item "All Sources" list.

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## What makes MyKonicaMinolta.com's Search feature so powerful?

The Search feature doesn't confine itself just to what shows up on a few web pages. Instead, it searches a great number of repositories to find relevant information. In any large corporation, information tends to become "siloed" in different areas in order to meet business needs. MyKonicaMinolta.com leverages that structure to pick out the most meaningful information.

Note that not every link will take you directly to a specific document. For some things, you will be taken to an embedded web function, such as the firmware and driver selectors in One Stop Product Support, where you can further refine your query.



## SERVICE COMMUNICATION BULLETIN

Solutions Support Division

Bulletin #: 9256 Date: 05/27/14

**Subject:** National Solutions Group

Service Communication: 177

The Konica Minolta Solutions Support Division SSD is pleased to announce the formation of the National Solutions Group, which is solely dedicated to providing technical assistance for Solutions in the form of Presale, Installation and Post-sale support.

NSG is an integrated team comprised of both regional field specialists and subject matter experts working in our Windsor-based labs. The mission for the NSG is to offer the highest, most efficient level of Solutions Support, and to do so on a national level.

In addition to offering World Class integration services, NSG has the ability to escalate both internal and external customer issues directly to our various Solutions vendors as well as Konica Minolta, Inc., Japan whenever necessary. The NSG team is prepared to provide callers with efficient phone support, remote support and field support with a higher level of expertise. Our goal is to provide a top-flight solutions integration experience for our dealers and branches and, most importantly, your customers.

Additionally NSG has established a faster and easy communication channel, using a new toll free number dedicated for Solutions **only**. The toll-free NSG number allows callers to have access to a highly trained Solutions Support Advisor. If your solution is contractually supported by the vendor, your call will be routed directly to them.

Please contact NSG at 855-315-8324 for all your Solutions support.

We look forward to helping you with your Solutions support needs!



## SERVICE COMMUNICATION BULLETIN

Solutions Support Division

Bulletin #: 9257 Date: 05/27/14

**Subject:** Solutions Support: New Dedicated Phone Number

Service Communication: 178

We are pleased to announce a new toll-free telephone number dedicated to support of the many solutions that are sold and supported by Konica Minolta.

Effective May 27, 2014, all calls for **Solutions Support** should be directed to the new telephone number:

855-315-8324 (toll free)

Using this new toll free number will help speed you on your way to getting the answers you need.

- You have only one number to call for support on any solution.
- Solutions supported directly by the Contact Support Center (CSC)

These calls will be routed to our specialized tiered Solutions Group within the CSC. These solutions include applications such as PageScope, eCopy, Equitrac, Dispatcher Phoenix, and others. Normal training requirements apply.

## · Solutions supported by vendors

Calls involving solutions that the CSC does not support directly will be routed automatically to the appropriate vendor support resource. You no longer need to search for a particular resource's phone number.



# SERVICE COMMUNICATION BULLETIN

Solutions Support Division

Bulletin #: 9267 Date: 05/28/14

**Subject:** Critical Accident Reporting (CAR) Procedure

Service Communication: 180

On rare occasions, an extraordinary incident which merits additional follow-up by Konica Minolta may occur. These incidents include those where a machine apparently exhibits smoke or flame, or where personal injury or property damage occurs. Konica Minolta must follow up on incidents of this nature on a timely basis, even if caused by human error, to identify specific causes of machine failure and to develop solutions or corrections to prevent future occurrences.

In an instance of this nature, **notify the SSD Contact Support Center (CSC) at 800-825-5664 as soon as you learn about the situation.** The CSC will provide guidance regarding proper handling and resolution of the situation. The CSC responsibility includes obtaining information from the field and communicating with Konica Minolta management, branch and dealer personnel, and end users, as appropriate.

## **IMPORTANT**

In order to protect Konica Minolta's interests, it is important that you call the CSC *before rendering any service* on a machine involved in a Critical Accident.

SSD will assess the incident and advise the technical manager of any actions that may be required, such as obtaining the service history, impounding the machine, or providing specific parts for analysis.

Incidents that qualify as Critical Accidents include the following, which is only a partial list:

- Bodily injury (burns, electrical shock, health concerns)
- Property damage
- Smoke, flame, scorching

- Offensive odor
- Abnormal heat generation
- Reports of extreme or extensive damage
- Suspicion of product safety

A complete description of situations that are covered under the CAR procedure can be found on pages 2-19 through 2-22 in the SSD Policies and Procedures, which can be found on One Stop Product Support on MyKonicaMinolta.com using this link:

http://onyxweb.mykonicaminolta.com/OneStopProductSupport?appMode=Internal.



MSDS No.:PRT-2543

Page:1/6

Product Name: TONER (Black)

Prepared Date: 13-Nov-2008 Revised Date: 31-Mar-2014

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: TONER (Black)

used for: magicolor4750DN/4750EN/3730DN/3730N, bizhub C35/C35P/C25, C3110/C3100P

Supplier Identification:

Konica Minolta Business Solutions U.S.A., Inc.

100 Williams Drive, Ramsey, New Jersey 07446, U.S.A.

Telephone: 201-825-4000

Emergency Telephone No.

**CHEMTREC** 

Telephone: 1-800-424-9300

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance [ ] Preparation [ X ]

Major Ingredients:

 [Generic Name]
 [CAS No.]
 [%]

 Styrene acrylic resin
 +++
 75-85

 Wax
 +++
 10-20

 Carbon black
 1333-86-4
 1-10

 Amorphous silica
 7631-86-9
 1-10

+++: Supplier's confidential information

Hazardous Ingredients:

Chemical Name: Carbon black (1-10%)

CAS No.: 1333-86-4 EEC-No.: 215-609-9

OSHA Z-Tables(USA): 3.5mg/m3 ACGIH-TLV(USA): 3mg/m3 NTP(USA): Not listed IARC Monographs: Group 2B

California Proposition 65(USA): Listed

Symbol(EC): Not listed R-Phrase(EC): Not listed

DFG-MAK(GER): III 3B Worksafe-TWA(Austl): 3mg/m3



MSDS No.:PRT-2543

Page:2/6

Product Name: TONER (Black)

Prepared Date: 13-Nov-2008 Revised Date: 31-Mar-2014

## 3. HAZARDS IDENTIFICATION

Emergency Overview: Black powder (mean dia. is 5-10um by volume ).

Almost oderless.

Classification: Not classified as dangerous. (1999/45/EC)

Most Important Hazards and Effects of the Products Ingestion Effect: None currently known.

Inhalation Effect: None currently known. Minimal respiratory tract irritation may occur as with exposure

to large amount of any non-toxic dust.

Eye Effect: None currently known.
Skin Effect: None currently known.

Chronic Effects: Prolonged inhalation of excessive dusts may cause lung damage. Use of this

product, as intended, does not result in inhalation of excessive dust.

Environment Hazards: No data are available on the adverse effects of this product on the environment.

Specific Hazards: Dust explosion(like most finely divided organic powders)

## 4. FIRST-AID MEASURES

Ingestion: Wash out mouth with water. Drink one or two glasses of water. If symptoms occur, get medical

attention.

Inhalation: Move victim to fresh air immediately. If symptoms occur, get medical attention.

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. If symptoms occur, get medical

attention.

Skin Contact: Wash with water and mild soap.

## 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: CO2, water spray, foam and dry chemical

Extinguishing Media to Avoid: Full water jet

Fire and Explosion Hazards: If dispersed in air, like most finely divided organic powders, may form an explosive

mixture.

Protection of Firefighters: Use self-contained breathing apparatus(SCBA).

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: None Environmental Precautions: None

Methods for Cleaning Up: Wear personal protective equipment(See Section 8). Vacuum or sweep material

and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air(HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.



MSDS No.:PRT-2543

Page:3/6

Product Name: TONER (Black)

Prepared Date: 13-Nov-2008 Revised Date: 31-Mar-2014

## 7. HANDLING AND STORAGE

Handling

Technical Measures: None

Precautions: Do not breathe dust. Avoid contact with eyes.

Safe Handling Advice: Try not to disperse the particulates.

Storage

Technical Measures: None

Storage Conditions: Keep container closed. Store in a cool and dry place. Keep out of reach of children.

Incompatible Products: None

Packaging Materials: Bottles or Cartridge designated by Konica Minolta.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures** 

Ventilation: None required with intended use.

Control Parameters(As total dust)

ACGIH-TLV(USA): 10mg/m3 (Inhalable particles), 3.0 mg/m3 (Respirable particles)
OSHA-PEL(USA): 15mg/m3 (Total dusts), 5.0 mg/m3 (Respirable fraction)
DFG-MAK(GER): 4mg/m3 (Inhalable fraction), 1.5mg/m3 (Respirable fraction)

Worksafe-TWA(Austl.): 10mg/m3

Personal Protective Equipment

Not required under normal conditions. For use other than in normal operating procedures (such as in the

event of large spill), goggles and respirators may be required.

Hygiene Measures: Wash hands after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** 

Physical State: Solid Color: Black

Form: Powder (mean dia. is 5-10um by volume)

Odor: Almost odorless
PH Not applicable
Boiling Point(°C): Not applicable

Melting Point(°C)/[F]: Around No data available /[] (Softening Point)

Flash Point(°C):

Ignition Temperature(°C):

Explosion Properties:

Vapor Pressure:

Not applicable

No data available

No data available

Not applicable

Specific Gravity: 1.2

Solubility: Insoluble in water.

Partition Coefficient, n-Octanol/Water: Not applicable



MSDS No.:PRT-2543

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Product Name: TONER (Black)

Prepared Date: 13-Nov-2008 Revised Date: 31-Mar-2014

## 10. STABILITY AND REACTIVITY

Stability: Stable except above 200C(392F).

Hazardous Reactions: Dust explosion, like most finely divided organic powders.

Conditions to avoid: Electric discharge, throwing into fire.

Materials to Avoid: Oxidizing materials.

Hazardous Decomposition Products: CO, CO2, NOx and smoke.

Hazardous Polymerization: Will not occur.

## 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion(oral), LD50(mg/kg): >2500(Rat)

Dermal, LD50(mg/kg): No data available

Inhalation, LC50(mg/l): >5.10(Rat,4hour)

(This was the highest attainable concentration.)

Eye irritation: Non irritant(Rabbit)

Skin irritation: Non irritant(Rabbit)

Skin sensitizer: Non sensitizer (Guinea pig)

Local Effects: see Chronic Toxicity or Long term Toxicity

Chronic Toxicity or Long Term Toxicity:

In a two-year inhalation study of chronic toxicity and carcinogenicity using a typical toner in rats, there were no lung changes at all in the lowest exposure level (1mg/m3), the most relevant level to potential human exposures. A minimal to mild degree of fibrosis was noted in 22% of the animals at the middle exposure level (4mg/m3), and a mild to moderate degree of fibrosis was observed in 92% of the rats at the highest exposure level(16mg/m3). The lung changes observed in the higher exposure groups are interpreted in terms of "lung overloading", a series of generic responses to the presence of large quantities of respirable, insoluble and relatively benign dusts retained for extended time periods in the lungs. Lung tumor frequency was unchanged among rats exposed to toner at the three exposure levels, and for air-only control rats.

## Carcinogenicity

The IARC reevaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This evaluation is given to Carbon Black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung.

Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

Mutagenicity: Negative(AMES test)
Teratogenicity: No data available

(\*= Based on data for other Konica Minolta Products with similar ingredients)



MSDS No.:PRT-2543

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Product Name: TONER (Black)

Prepared Date: 13-Nov-2008 Revised Date: 31-Mar-2014

## 12. ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment.

Ecotoxicity: No data available
Mobility: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available

## 13. DISPOSAL CONSIDERATION

When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

## 14. TRANSPORT INFORMATION

Information on Code and Classifications According to International Regulations

UN Classification: None

Further information: Not a dangerous good under IATA or IMDG.

## 15. REGULATORY INFORMATION

**US** Information

Information on the label: Not required

TSCA(Toxic Substances Control Act):

All chemical substances in this product comply with all applicable rules or order under TSCA.

California Proposition 65:

Ingredient carbon black subject to California Proposition 65 is bound in polymer-matrices so that warnings are not required.

**EU Information** 

Information on the label (1999/45/EC and 67/548/EEC): Not required

Article14 (2.1) of Directive 1999/45/EC is not applicable to this product.

WHMIS(Canada): This product is NOT subject to the controlled products regulations.

## 16. OTHER INFORMATION

HMIS Rating: The National Paint and Coating Association(USA): Health: 1 Flammability: 1 Reactivity: 0

Recommended Uses: Toner for Electrophotographic Equipment

Explanation of term: IARC 2B means "possible human carcinogen".

Revision Information: Regular revision on revised date.

Literature References:

ANSI Z400.1-1993

ISO 11014-1

Commission Directive 91/155/EEC

IARC(2010): IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans,

Vol. 93, Carbon Black, Titanium Dioxide, and Talc, Lyon, pp. 43-191

H.Muhle, B.Bellmann, O.Creutzenberg, C.Dasenbrock, H.Ernst, R.Kilpper, J.C.MacKenzie, P.Morrow,

U.Mohr, S.Takenaka, and R.Mermelstein(1991)

Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats. Fundamental and Applied

Toxicology 17, pp.280-299.



MSDS No.:PRT-2543

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Product Name: TONER (Black)

Prepared Date: 13-Nov-2008 Revised Date: 31-Mar-2014

## Restrictions:

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MSDS No.: PRT-2553

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Product Name: TONER (Yellow)

Prepared date:13-Nov-2008 Revised Date: 31-Mar-2014

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: TONER (Yellow)

used for: magicolor4750DN/4750EN/3730DN/3730N, bizhub C35/C35P/C25, C3110/C3100P

Supplier Identification:

Konica Minolta Business Solutions U.S.A., Inc.

100 Williams Drive, Ramsey, New Jersey 07446, U.S.A.

Telephone: 201-825-4000

Emergency Telephone No.

**CHEMTREC** 

Telephone: 1-800-424-9300

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance [ ] Preparation [ X ]

Major Ingredients:

| [Generic Name]        | [CAS No.]  | [%]   |
|-----------------------|------------|-------|
| Styrene acrylic resin | +++        | 75-85 |
| Wax                   | +++        | 10-20 |
| Organic pigment       | +++        | 1-10  |
| Amorphous silica      | 7631-86-9  | 1-10  |
| Titanium dioxide      | 13463-67-7 | < 1   |

## +++: Supplier's confidential information

Hazardous Ingredients:

Chemical Name: Titanium dioxide (<1%)

CAS No.: 13463-67-7 EEC-No.: 236-675-5

OSHA Z-Tables(USA):15mg/m3 ACGIH-TLV(USA): 10mg/m3 NTP(USA): Not listed IARC Monographs: Group 2B Symbol(EC): Not listed R-Phrase(EC): Not listed

Worksafe-TWA(Austl): 10mg/m3



MSDS No.: PRT-2553

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Product Name: TONER (Yellow)

Prepared date: 13-Nov-2008 Revised Date: 31-Mar-2014

#### 3. HAZARDS IDENTIFICATION

Emergency Overview: Yellow powder (mean dia. is 5-10um by volume ).

Almost odorless

Classification: Not classified as dangerous. (1999/45/EC)

Most Important Hazards and Effects of the Products

Ingestion Effect: None currently known.

Inhalation Effect: None currently known. Minimal respiratory tract irritation may occur as with exposure

to large amount of any non-toxic dust.

Eye Effect: None currently known.
Skin Effect: None currently known.

Chronic Effects: Prolonged inhalation of excessive dusts may cause lung damage. Use of this product,

as intended, does not result in inhalation of excessive dust.

Environment Hazards: No data are available on the adverse effects of this product on the environment.

Specific Hazards: Dust explosion (like most finely divided organic powders)

## 4. FIRST-AID MEASURES

Ingestion: Wash out mouth with water. Drink one or two glasses of water. If symptoms occur, get medical

attention.

Inhalation: Move victim to fresh air immediately. If symptoms occur, get medical attention.

Eye Contact: Flush eyes with plenty of water for 15 minutes. If symptoms occur, get medical attention.

Skin Contact: Wash with water and mild soap.

## 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: CO2, water spray, foam and dry chemical

Extinguishing Media to Avoid: Full water jet

Fire and Explosion Hazards: If dispersed in air, like most finely divided organic powders, may form an explosive

mixture.

Protection of Firefighters: Use self-contained breathing apparatus(SCBA).

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: None Environmental Precautions: None

Methods for Cleaning Up: Wear personal protective equipment(See Section 8). Vacuum or sweep material

and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air(HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.



MSDS No.: PRT-2553

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Product Name: TONER (Yellow)

Prepared date:13-Nov-2008 Revised Date: 31-Mar-2014

#### 7. HANDLING AND STORAGE

Handling

Technical Measures: None

Precautions: Do not breathe dust. Avoid contact with eyes.

Safe Handling Advice: Try not to disperse the particulates.

Storage

Technical Measures: None

Storage Conditions: Keep container closed. Store in a cool and dry place. Keep out of reach of children.

Incompatible Products: None

Packaging Materials: Bottles or Cartridge designated by Konica Minolta.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures** 

Ventilation: None required with intended use.

Control Parameters(As total dust)

ACGIH-TLV(USA): 10mg/m3 (Inhalable particles), 3.0 mg/m3 (Respirable particles)
OSHA-PEL(USA): 15mg/m3 (Total dusts), 5.0 mg/m3 (Respirable fraction)
DFG-MAK(GER): 4mg/m3 (Inhalable fraction), 1.5mg/m3 (Respirable fraction)

Worksafe-TWA(Austl.): 10mg/m3

Personal Protective Equipment

Not required under normal conditions. For use other than in normal operating procedures (such as in the event of large spill), goggles and respirators may be required.

Hygiene Measures: Wash hands after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** 

Physical State: Solid Color: Yellow

Form: Powder (mean dia. is 5-10um by volume)

Odor: Almost odorless
PH Not applicable
Boiling Point(°C): Not applicable

Melting Point(°C): Around 125C(257F) (Softening Point)

Flash Point(°C):

Ignition Temperature(°C):

Explosion Properties:

Vapor Pressure:

Not applicable

No data available

Not applicable

Specific Gravity: 1.2

Solubility: Insoluble in water.

Partition Coefficient, n-Octanol/Water: Not applicable



MSDS No.: PRT-2553

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Product Name: TONER (Yellow)

Prepared date:13-Nov-2008 Revised Date: 31-Mar-2014

## 10. STABILITY AND REACTIVITY

Stability: Stable except above 200C(392F).

Hazardous Reactions: Dust explosion, like most finely divided organic powders.

Conditions to avoid: Electric discharge, throwing into fire.

Materials to Avoid: Oxidizing materials.

Hazardous Decomposition Products: CO, CO2, NOx and smoke.

Hazardous Polymerization: Will not occur.

## 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion(oral), LD50(mg/kg): >2500 (Rat)

Dermal, LD50(mg/kg): No data available

Inhalation, LC50(mg/l): >5.57 (Rat,4hour)(This was the highest attainable concentration.)

Eye irritation: Minimal irritant (Rabbit)
Skin irritation: Non irritant (Rabbit)

Skin sensitizer: Non sensitizer (Guinea pig)

Local Effects: see Chronic Toxicity or Long term Toxicity

Chronic Toxicity or Long Term Toxicity:

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in inhalation of excessive dust.

In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of rats in the high concentration(16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle(4mg/m³) exposure group. But no pulmonary change was reported in the lowest(1mg/m³) exposure group, the most relevant level to potential human exposures.

## Carcinogenicity

The IARC reevaluated titanium dioxide as a Group 2B carcinogen (possible human carcinogen). In animal chronic inhalation studies, the tumor formulation observed in only rats with animal chronic inhalation study are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, dose not result in inhalation of excessive dust. Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

Mutagenicity: Negative (AMES test)
Teratogenicity: No data available

(\*= Based on data for other Konica Minolta Products with similar ingredients)

## 12. ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment.

Ecotoxicity: No data available

Mobility: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available



MSDS No.: PRT-2553

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Product Name: TONER (Yellow)

Prepared date:13-Nov-2008 Revised Date: 31-Mar-2014

#### 13. DISPOSAL CONSIDERATION

When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

## 14. TRANSPORT INFORMATION

Information on Code and Classifications According to International Regulations

**UN Classification: None** 

Further information: Not a dangerous good under IATA or IMDG.

## 15. REGULATORY INFORMATION

**US** Information

Information on the label: Not required TSCA(Toxic Substances Control Act):

All chemical substances in this product comply with all applicable rules or order under TSCA.

California Proposition 65:

This product contains no chemical substances subject to California Proposition 65.

**EU** Information

Information on the label (1999/45/EC and 67/548/EEC): Not required

Article14 (2.1) of Directive 1999/45/EC is not applicable to this product.

WHMIS(Canada): This product is NOT subject to the controlled products regulations.

## 16. OTHER INFORMATION

HMIS Rating: The National Paint and Coating Association(USA): Health: 1 Flammability: 1 Reactivity: 0

Recommended Uses: Toner for Electrophotographic Equipment Explanation of term: IARC 2B means "possible human carcinogen".

Revision Information: Regular revision on revised date.

Literature References:

ANSI Z400.1-1993

ISO 11014-1

Commission Directive 91/155/EEC

IARC(2010): IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans,

Vol. 93, Carbon Black, Titanium Dioxide, and Talc, Lyon, pp. 193-276

H.Muhle, B.Bellmann, O.Creutzenberg, C.Dasenbrock, H.Ernst, R.Kilpper, J.C.MacKenzie, P.Morrow, U.Mohr, S.Takenaka, and R.Mermelstein(1991)

Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats. Fundamental and Applied Toxicology 17, pp.280-299.

NIOSH CURRENT INTELLIGENCE BULLETIN : Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide :DRAFT

## Restrictions:

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MSDS No.: PRT-2563

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Product Name: TONER (Magenta)

Prepared date:13-Nov-2008 Revised Date: 31-Mar-2014

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: TONER (Magenta)

used for: magicolor4750DN/4750EN/3730DN/3730N, bizhub C35/C35P/C25, C3110/C3100P

Supplier Identification:

Konica Minolta Business Solutions U.S.A., Inc.

100 Williams Drive, Ramsey, New Jersey 07446, U.S.A.

Telephone: 201-825-4000

Emergency Telephone No.

**CHEMTREC** 

Telephone: 1-800-424-9300

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance [ ] Preparation [ X ]

Major Ingredients:

| [Generic Name]        | [CAS No.]  | [%]   |
|-----------------------|------------|-------|
| Styrene acrylic resin | +++        | 70-80 |
| Wax                   | +++        | 10-20 |
| Organic pigment 1     | +++        | 1-10  |
| Organic pigment 2     | +++        | 1-10  |
| Amorphous silica      | 7631-86-9  | 1-10  |
| Titanium dioxide      | 13463-67-7 | < 1   |

## +++: Supplier's confidential information

Hazardous Ingredients:

Chemical Name: Titanium dioxide (<1%)

CAS No.: 13463-67-7 EEC-No.: 236-675-5

OSHA Z-Tables(USA):15mg/m3 ACGIH-TLV(USA): 10mg/m3 NTP(USA): Not listed IARC Monographs: Group 2B Symbol(EC): Not listed R-Phrase(EC): Not listed

Worksafe-TWA(Austl): 10mg/m3



MSDS No.: PRT-2563

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Product Name: TONER (Magenta)

Prepared date: 13-Nov-2008 Revised Date: 31-Mar-2014

#### 3. HAZARDS IDENTIFICATION

Emergency Overview: Red powder (mean dia. is 5-10um by volume).

Almost odorless

Classification: Not classified as dangerous. (1999/45/EC)

Most Important Hazards and Effects of the Products

Ingestion Effect: None currently known.

Inhalation Effect: None currently known. Minimal respiratory tract irritation may occur as with exposure

to large amount of any non-toxic dust.

Eye Effect: None currently known.

Skin Effect: None currently known.

Chronic Effects: Prolonged inhalation of excessive dusts may cause lung damage. Use of this product,

as intended, does not result in inhalation of excessive dust.

Environment Hazards: No data are available on the adverse effects of this product on the environment.

Specific Hazards: Dust explosion (like most finely divided organic powders)

## 4. FIRST-AID MEASURES

Ingestion: Wash out mouth with water. Drink one or two glasses of water. If symptoms occur, get medical

attention.

Inhalation: Move victim to fresh air immediately. If symptoms occur, get medical attention.

Eye Contact: Flush eyes with plenty of water for 15 minutes. If symptoms occur, get medical attention.

Skin Contact: Wash with water and mild soap.

## 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: CO2, water spray, foam and dry chemical

Extinguishing Media to Avoid: Full water jet

Fire and Explosion Hazards: If dispersed in air, like most finely divided organic powders, may form an explosive

mixture.

Protection of Firefighters: Use self-contained breathing apparatus(SCBA).

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: None Environmental Precautions: None

Methods for Cleaning Up: Wear personal protective equipment(See Section 8). Vacuum or sweep material

and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air(HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.



MSDS No.: PRT-2563

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Product Name: TONER (Magenta)

Prepared date:13-Nov-2008 Revised Date: 31-Mar-2014

## 7. HANDLING AND STORAGE

Handling

Technical Measures: None

Do not breathe dust. Avoid contact with eyes. Precautions:

Safe Handling Advice: Try not to disperse the particulates.

Storage

Technical Measures: None

Storage Conditions: Keep container closed. Store in a cool and dry place. Keep out of reach of children.

Incompatible Products: None

Packaging Materials: Bottles or Cartridge designated by Konica Minolta.

## EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures** 

Ventilation: None required with intended use.

Control Parameters(As total dust)

ACGIH-TLV(USA): 10mg/m3 (Inhalable particles), 3.0 mg/m3 (Respirable particles) OSHA-PEL(USA): 15mg/m3 (Total dusts), 5.0 mg/m3 (Respirable fraction) DFG-MAK(GER): 4mg/m3 (Inhalable fraction), 1.5mg/m3 (Respirable fraction)

Worksafe-TWA(Austl.): 10mg/m3

Personal Protective Equipment

Not required under normal conditions. For use other than in normal operating procedures (such as in the event of large spill), goggles and respirators may be required.

Wash hands after handling. Hygiene Measures:

## PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** 

Physical State: Solid Color: Red

Form: Powder (mean dia. is 5-10um by volume)

Odor: Almost odorless PH Not applicable Boiling Point(°C): Not applicable

Melting Point(°C): Around 125C(257F) (Softening Point)

Flash Point(°C): Not applicable Ignition Temperature(°C): No data available **Explosion Properties:** No data available Vapor Pressure: Not applicable

Specific Gravity: 1.2

Insoluble in water. Solubility: Partition Coefficient, n-Octanol/Water: Not applicable



MSDS No.: PRT-2563

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Product Name: TONER (Magenta)

Prepared date:13-Nov-2008 Revised Date: 31-Mar-2014

## 10. STABILITY AND REACTIVITY

Stability: Stable except above 200C(392F).

Hazardous Reactions: Dust explosion, like most finely divided organic powders.

Conditions to avoid: Electric discharge, throwing into fire.

Materials to Avoid: Oxidizing materials.

Hazardous Decomposition Products: CO, CO2, NOx and smoke.

Hazardous Polymerization: Will not occur.

## 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion(oral), LD50(mg/kg): >2500 (Rat)

Dermal, LD50(mg/kg): No data available

Inhalation, LC50(mg/l): >4.77 (Rat,4hour)(This was the highest attainable concentration.)

Eye irritation: Minimal irritant (Rabbit)
Skin irritation: Non irritant (Rabbit)

Skin sensitizer: Non sensitizer (Guinea pig)

Local Effects: see Chronic Toxicity or Long term Toxicity

Chronic Toxicity or Long Term Toxicity:

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in inhalation of excessive dust.

In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of rats in the high concentration(16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle(4mg/m³) exposure group. But no pulmonary change was reported in the lowest(1mg/m³) exposure group, the most relevant level to potential human exposures.

## Carcinogenicity

The IARC reevaluated titanium dioxide as a Group 2B carcinogen (possible human carcinogen). In animal chronic inhalation studies, the tumor formulation observed in only rats with animal chronic inhalation study are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, dose not result in inhalation of excessive dust. Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

Mutagenicity: Negative (AMES test)
Teratogenicity: No data available

(\*= Based on data for other Konica Minolta Products with similar ingredients)

## 12. ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment.

Ecotoxicity: No data available

Mobility: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available



MSDS No.: PRT-2563

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Product Name: TONER (Magenta)

Prepared date:13-Nov-2008 Revised Date: 31-Mar-2014

#### 13. DISPOSAL CONSIDERATION

When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

## 14. TRANSPORT INFORMATION

Information on Code and Classifications According to International Regulations

**UN Classification: None** 

Further information: Not a dangerous good under IATA or IMDG.

## 15. REGULATORY INFORMATION

**US** Information

Information on the label: Not required TSCA(Toxic Substances Control Act):

All chemical substances in this product comply with all applicable rules or order under TSCA.

California Proposition 65:

This product contains no chemical substances subject to California Proposition 65.

**EU** Information

Information on the label (1999/45/EC and 67/548/EEC): Not required

Article14 (2.1) of Directive 1999/45/EC is not applicable to this product.

WHMIS(Canada): This product is NOT subject to the controlled products regulations.

## 16. OTHER INFORMATION

HMIS Rating: The National Paint and Coating Association(USA): Health: 1 Flammability: 1 Reactivity: 0

Recommended Uses: Toner for Electrophotographic Equipment Explanation of term: IARC 2B means "possible human carcinogen".

Revision Information: Regular revision on revised date.

Literature References:

ANSI Z400.1-1993

ISO 11014-1

Commission Directive 91/155/EEC

IARC(2010): IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans,

Vol. 93, Carbon Black, Titanium Dioxide, and Talc, Lyon, pp. 193-276

H.Muhle, B.Bellmann, O.Creutzenberg, C.Dasenbrock, H.Ernst, R.Kilpper, J.C.MacKenzie, P.Morrow, U.Mohr, S.Takenaka, and R.Mermelstein(1991)

Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats. Fundamental and Applied Toxicology 17, pp.280-299.

NIOSH CURRENT INTELLIGENCE BULLETIN : Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide :DRAFT

## Restrictions:

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MSDS No.: PRT-2573

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Product Name: TONER (Cyan)

Prepared date:13-Nov-2008 Revised Date: 31-Mar-2014

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: TONER (Cyan)

used for: magicolor4750DN/4750EN/3730DN/3730N, bizhub C35/C35P/C25, C3110/C3100P

Supplier Identification:

Konica Minolta Business Solutions U.S.A., Inc.

100 Williams Drive, Ramsey, New Jersey 07446, U.S.A.

Telephone: 201-825-4000

Emergency Telephone No.

**CHEMTREC** 

Telephone: 1-800-424-9300

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance [ ] Preparation [ X ]

Major Ingredients:

| [Generic Name]        | [CAS No.]  | [%]   |
|-----------------------|------------|-------|
| Styrene acrylic resin | +++        | 75-85 |
| Wax                   | +++        | 10-20 |
| Organic pigment       | 147-14-8   | 1-10  |
| Amorphous silica      | 7631-86-9  | 1-10  |
| Titanium dioxide      | 13463-67-7 | < 1   |

## +++: Supplier's confidential information

Hazardous Ingredients:

Chemical Name: Titanium dioxide (<1%)

CAS No.: 13463-67-7 EEC-No.: 236-675-5

OSHA Z-Tables(USA):15mg/m3 ACGIH-TLV(USA): 10mg/m3 NTP(USA): Not listed IARC Monographs: Group 2B Symbol(EC): Not listed R-Phrase(EC): Not listed

Worksafe-TWA(Austl): 10mg/m3



MSDS No.: PRT-2573

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Product Name: TONER (Cyan)

Prepared date:13-Nov-2008 Revised Date: 31-Mar-2014

## 3. HAZARDS IDENTIFICATION

Emergency Overview: Cyan powder (mean dia. is 5-10um by volume ).

Almost odorless

Classification: Not classified as dangerous. (1999/45/EC)

Most Important Hazards and Effects of the Products

Ingestion Effect: None currently known.

Inhalation Effect: None currently known. Minimal respiratory tract irritation may occur as with exposure

to large amount of any non-toxic dust.

Eye Effect: None currently known.

Skin Effect: None currently known.

Chronic Effects: Prolonged inhalation of excessive dusts may cause lung damage. Use of this product,

as intended, does not result in inhalation of excessive dust.

Environment Hazards: No data are available on the adverse effects of this product on the environment.

Specific Hazards: Dust explosion (like most finely divided organic powders)

## 4. FIRST-AID MEASURES

Ingestion: Wash out mouth with water. Drink one or two glasses of water. If symptoms occur, get medical

attention.

Inhalation: Move victim to fresh air immediately. If symptoms occur, get medical attention.

Eye Contact: Flush eyes with plenty of water for 15 minutes. If symptoms occur, get medical attention.

Skin Contact: Wash with water and mild soap.

## 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: CO2, water spray, foam and dry chemical

Extinguishing Media to Avoid: Full water jet

Fire and Explosion Hazards: If dispersed in air, like most finely divided organic powders, may form an explosive

mixture.

Protection of Firefighters: Use self-contained breathing apparatus(SCBA).

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: None Environmental Precautions: None

Methods for Cleaning Up: Wear personal protective equipment(See Section 8). Vacuum or sweep material

and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air(HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.



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#### 7. HANDLING AND STORAGE

Handling

Technical Measures: None

Precautions: Do not breathe dust. Avoid contact with eyes.

Safe Handling Advice: Try not to disperse the particulates.

Storage

Technical Measures: None

Storage Conditions: Keep container closed. Store in a cool and dry place. Keep out of reach of children.

Incompatible Products: None

Packaging Materials: Bottles or Cartridge designated by Konica Minolta.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures** 

Ventilation: None required with intended use.

Control Parameters(As total dust)

ACGIH-TLV(USA): 10mg/m3 (Inhalable particles), 3.0 mg/m3 (Respirable particles)
OSHA-PEL(USA): 15mg/m3 (Total dusts), 5.0 mg/m3 (Respirable fraction)
DFG-MAK(GER): 4mg/m3 (Inhalable fraction), 1.5mg/m3 (Respirable fraction)

Worksafe-TWA(Austl.): 10mg/m3

Personal Protective Equipment

Not required under normal conditions. For use other than in normal operating procedures (such as in the

event of large spill), goggles and respirators may be required.

Hygiene Measures: Wash hands after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** 

Physical State: Solid Color: Cyan

Form: Powder (mean dia. is 5-10um by volume)

Odor: Almost odorless
PH Not applicable
Boiling Point(°C): Not applicable

Melting Point(°C): Around 125C(257F) (Softening Point)

Flash Point(°C):

Ignition Temperature(°C):

Explosion Properties:

Vapor Pressure:

Not applicable

No data available

Not applicable

Specific Gravity: 1.2

Solubility: Insoluble in water.

Partition Coefficient, n-Octanol/Water: Not applicable



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## 10. STABILITY AND REACTIVITY

Stability: Stable except above 200C(392F).

Hazardous Reactions: Dust explosion, like most finely divided organic powders.

Conditions to avoid: Electric discharge, throwing into fire.

Materials to Avoid: Oxidizing materials.

Hazardous Decomposition Products: CO, CO2, NOx and smoke.

Hazardous Polymerization: Will not occur.

## 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion(oral), LD50(mg/kg): >2500 (Rat)

Dermal, LD50(mg/kg): No data available

Inhalation, LC50(mg/l): >5.08 (Rat,4hour)(This was the highest attainable concentration.)

Eye irritation: Minimal irritant (Rabbit)
Skin irritation: Non irritant (Rabbit)

Skin sensitizer: Non sensitizer (Guinea pig)

Local Effects: see Chronic Toxicity or Long term Toxicity

Chronic Toxicity or Long Term Toxicity:

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in inhalation of excessive dust.

In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of rats in the high concentration(16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle(4mg/m³) exposure group. But no pulmonary change was reported in the lowest(1mg/m³) exposure group, the most relevant level to potential human exposures.

## Carcinogenicity

The IARC reevaluated titanium dioxide as a Group 2B carcinogen (possible human carcinogen). In animal chronic inhalation studies, the tumor formulation observed in only rats with animal chronic inhalation study are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, dose not result in inhalation of excessive dust. Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

Mutagenicity: Negative (AMES test)
Teratogenicity: No data available

(\*= Based on data for other Konica Minolta Products with similar ingredients)

## 12. ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment.

Ecotoxicity: No data available

Mobility: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available



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#### 13. DISPOSAL CONSIDERATION

When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

## 14. TRANSPORT INFORMATION

Information on Code and Classifications According to International Regulations

**UN Classification: None** 

Further information: Not a dangerous good under IATA or IMDG.

## 15. REGULATORY INFORMATION

**US** Information

Information on the label: Not required TSCA(Toxic Substances Control Act):

All chemical substances in this product comply with all applicable rules or order under TSCA.

California Proposition 65:

This product contains no chemical substances subject to California Proposition 65.

**EU** Information

Information on the label (1999/45/EC and 67/548/EEC): Not required

Article14 (2.1) of Directive 1999/45/EC is not applicable to this product.

WHMIS(Canada): This product is NOT subject to the controlled products regulations.

## 16. OTHER INFORMATION

HMIS Rating: The National Paint and Coating Association(USA): Health: 1 Flammability: 1 Reactivity: 0

Recommended Uses: Toner for Electrophotographic Equipment Explanation of term: IARC 2B means "possible human carcinogen".

Revision Information: Regular revision on revised date.

Literature References:

ANSI Z400.1-1993

ISO 11014-1

Commission Directive 91/155/EEC

IARC(2010): IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans,

Vol. 93, Carbon Black, Titanium Dioxide, and Talc, Lyon, pp. 193-276

H.Muhle, B.Bellmann, O.Creutzenberg, C.Dasenbrock, H.Ernst, R.Kilpper, J.C.MacKenzie, P.Morrow, U.Mohr, S.Takenaka, and R.Mermelstein(1991)

Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats. Fundamental and Applied Toxicology 17, pp.280-299.

NIOSH CURRENT INTELLIGENCE BULLETIN : Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide :DRAFT

## Restrictions:

The above information is believed to be accurate and represents the best information currently available to Our Corporation. However, Our Corporation makes no warranty with respect to such information, and Our Corporation assumes no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.



## Product environmental attributes - THE ECO DECLARATION

The declaration may be published only when all rows and/or fields marked with an \* are filled-in (n.a. for not applicable).

Additional information regarding each item may be found under P14.

| Brand *                | Konica Minolta                                    | Logo           |
|------------------------|---|----------------|
| Company name *         | Konica Minolta, Inc.                              |                |
| Contact information *  | https://wwws.konicaminolta.net/neoqa/gl/about.php | KONICA MINOLTA |
| Internet site *        | http://www.konicaminolta.com/index.html           |                |
| Additional information |   |                |

| The company declares (based on product specification or test results based obtained from sample testing), that the product conforms to the statements given in this declaration. |  |  |  |  |  |
|--|--|--|--|--|--|
| Type of product *  | Electrographic Printer                                       |  |  |  |  |
| Commercial name *  | bizhub   |  |  |  |  |
| Model number *   | C3100P   |  |  |  |  |
| Issue date *   | 3 April 2014   |  |  |  |  |
| Intended market *  | ☐ Global ☐ Europe ☒ Asia, Pacific & Japan ☒ Americas ☒ Other |  |  |  |  |
| Additional information   | version 1.0  |  |  |  |  |

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

| Quality | Control  | Requireme   | nt met |
|---------|--|-------------|--------|
| Item    |  | Yes         | No     |
| QC1 *   | The company enforces an internal quality control scheme to ensure the correctness of this eco declaration  | $\boxtimes$ |        |
| QC2 *   | The company is a member of an eco declaration system that enforces regular independent quality control such as organized by IT-Företagen (see www.itecodeclaration.org). | ol 🔀        |        |

| Model number * | bizhub C3100P | Logo |                |
|----------------|---------------|------|----------------|
| Issue date *   | 3 April 2014  |      | KONICA MINOLTA |

| Product | oduct environmental attributes - Legal requirements  |             |                   |             |  |
|---------|--|-------------|-------------------|-------------|--|
| Item    |  | Yes         | No                | n.a.        |  |
| P1      | Hazardous substances and preparations  |             |                   |             |  |
| P1.1*   | Products do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent chromium, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See legal reference and Note B1)  | $\boxtimes$ |                   |             |  |
| P1.2*   | Products do not contain Asbestos (see legal reference).  Comment: Legal reference has no maximum concentration value.  | $\boxtimes$ |                   |             |  |
| P1.3*   | Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC),   | X           |                   |             |  |
|         | hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration values.  |             |                   |             |  |
| P1.4*   | Products do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% polychlorinated terphenyl (PCT) in preparations (see legal reference).  | $\boxtimes$ |                   |             |  |
| P1.5*   | Products do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).   | $\boxtimes$ |                   |             |  |
| P1.6*   | Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS), Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference). Comment: Legal reference has no maximum concentration values.                                     |             |                   | $\boxtimes$ |  |
| P1.7*   | Textile and leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split  |             | $\overline{\Box}$ | $\boxtimes$ |  |
| D4 0*   | aromatic amines. (See legal reference and Note B1)   |             |                   |             |  |
| P1.8*   | Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (see legal reference).  |             |                   | $\boxtimes$ |  |
|         | Comment: Legal reference has no maximum concentration values.  |             |                   |             |  |
| P1.9*   | Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm²/week (see legal reference).   |             |                   | $\boxtimes$ |  |
|         | Comment: Max limit in legal reference when tested according to EN1811:1998.  |             |                   |             |  |
| P1.10*  | REACH Article 33 information about substances in articles is available at (add URL or mail contact):   |             |                   | X           |  |
| P2      | Batteries  |             |                   |             |  |
| P2.1*   | If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be  | $\boxtimes$ |                   |             |  |
|         | marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is provided in user manual. (See legal reference)  |             |                   |             |  |
| P2.2*   | Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)   | $\boxtimes$ |                   |             |  |
| P2.3*   | Batteries and accumulators are easily removable by either users or service providers (as dependent on the design of the product). Exception: Batteries that are permanently installed for safety, performance, medical or data integrity reasons do not have to be "easily removable". (See legal reference) |             |                   |             |  |
| P3      | Safety, EMC connection to the telephone network and labeling   |             |                   |             |  |
| P3.1*   | The product complies with legally required safety standards as specified (see legal reference).  | $\boxtimes$ | $\overline{}$     | $\Box$      |  |
| P3.2*   | The product complies with legally required standards for electromagnetic compatibility (see legal reference).  | $\boxtimes$ | ∺                 | ∺           |  |
| P3.3*   | If product is intended for connection to a public telecom network or contains a radio transmitter, it complies   |             |                   | $\boxtimes$ |  |
| P3.4*   | with legally required standards for radio and telecommunication devices (see legal reference).  The product is labeled to show conformance with applicable legal requirements (see legal reference).   | $\boxtimes$ |                   |             |  |
| P4      | Consumable materials   |             |                   |             |  |
| P4.1*   | If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see legal reference and Note B1).  | X           |                   |             |  |
| P4.2*   | If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).   | X           |                   |             |  |
| P4.3*   | If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these  | X           |                   |             |  |
| DE      | requirements is available (see legal reference).   |             |                   |             |  |
| P5      | Product packaging  |             |                   |             |  |
| P5.1*   | Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium and hexavalent chromium by weight of these together.  |             | <u> </u>          |             |  |
| P5.2*   | Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).  | $\boxtimes$ |                   |             |  |
| P5.3*   | The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol (see legal reference).  | $\boxtimes$ |                   |             |  |
|         | Comment: Legal reference has no maximum concentration values.  |             |                   |             |  |

Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %.

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| *mandatory to fill in . Additional information reparding each item may be found under P14.   | Produc |  | Require     | ement             | met               |
|--|--------|--|-------------|-------------------|-------------------|
| P6.11   Information for recyclers/treatment facilities is available (see legal reference).   |        |  | Yes         | No                | n.a.              |
| Disaspembly, recycling   |        |  |             |                   | 1                 |
| Disassembly, recycling   P7.1* Parts that have to be treated separately are easily separable   □ □     P7.2* Plastic materials in covers/housing have no surface coating.   □ □     P7.3* Plastic parts >100g consist of one material or of easily separable materials.   □ □     P7.4* Plastic parts >25 parts  |        |  |             |                   | X                 |
| P7.2*   Plastic materials in covers/housing have no surface coating.   | P7     | Disassembly, recycling   | -           |                   |                   |
| P7.3' Plastic parts >100g consist of one material or of easily separable materials.    P7.4' Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.   | P7.1*  | Parts that have to be treated separately are easily separable  | $\boxtimes$ |                   |                   |
| P7.4* Plastic parts ≥25g have material codes according to ISO 11469 referring ISO 1043.  | P7.2*  | Plastic materials in covers/housing have no surface coating.   | X           |                   |                   |
| P7.4* Plastic parts ≥25g have material codes according to ISO 11469 referring ISO 1043.  | P7.3*  | Plastic parts >100g consist of one material or of easily separable materials.  | $\boxtimes$ |                   |                   |
| P7.5 Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.    P7.6 Labels are easily separable. (This requirement does not apply to safety/regulatory labels).    P7.7 Upgrading can be done e.g. with processor, memory, cards or drives  P7.8 Upgrading can be done e.g. with processor, memory, cards or drives  P7.9 Spare parts are available after end of production for: 7 years  P7.10 Service is available after end of production for: 7 years  P7.11 Product cover/housing material type:  Material and substance requirements  P7.11 Product cover/housing material type:  Material type: P6 Material type: P7.12 Electrical cable insulation materials of power cables are PVC free.    P7.13 Electrical cable insulation materials of object aclasses are PVC free.    P7.14 All cover/housing plastic parts >25g are free from chlorine and bromine.    P7.15 All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See   | P7.4*  | Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.  |             | $\overline{\Box}$ | $\overline{\Box}$ |
| P7.6' Labels are easily separable. (This requirement does not apply to safety/regulatory labels).    Product lifetime  |        |  |             | $\dashv$          | Ħ                 |
| P7.7* Upgrading can be done e.g. with processor, memory, cards or drives   |        |  |             |                   | $\overline{\Box}$ |
| P7.7°   Upgrading can be done e.g. with processor, memory, cards or drives   |        | Product lifetime   |             | _                 |                   |
| P7.8° Upgrading can be done using commonly available tools  P7.9 Spare parts are available after end of production for: 7 years  P7.10 Service is available after end of production for: 7 years    Material and substance requirements  P7.11° Product cover/housing material type: Material type: Material type: PC P7.14  | P7.7*  |  |             | П                 | X                 |
| P7.9. Spare parts are available after end of production for: 7 years    P7.10   Service is available after end of production for: 7 years  | P7.8*  |  | 一一          |                   |                   |
| P7.10   Service is available after end of production for: 7 years   Material and substance requirements  | P7.9.  | Spare parts are available after end of production for: <b>7</b> years  |             |                   | 一                 |
| Material and substance requirements  | P7.10  |  | _           |                   | $\overline{\Box}$ |
| P7.11*   Product cover/housing material type: Material type: PS   Material type: PC+ABS   Material type: PC  |        | <u> </u>   |             |                   |                   |
| P7.12 Electrical cable insulation materials of power cables are PVC free.  P7.13 Electrical cable insulation materials of signal cables are PVC free  P7.14 All cover/housing plastic parts >25g are free from chlorine and bromine.  P7.15 All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See Note B2)  P7.16 Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:  P7.17 Alt. 1  Chemical specifications of flame retardants in printed circuit boards >25g (without components):  TBBPA (additive), TBBPA (reactive), Other; chemical name:, CAS #:  Alt. 2  Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: FR(17)  P7.18 Alt. 1  Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:  Comment: No legal limits exist, this is a market requirement.  1. Chemical name:, CAS #:  2. Chemical name:, CAS #:  3. Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR(17), FR(40)  P7.19 Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45,  | P7.11* |  |             |                   |                   |
| P7.13 Electrical cable insulation materials of signal cables are PVC free  P7.14 All cover/housing plastic parts >25g are free from chlorine and bromine.  P7.15 All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See Note B2)  P7.16 Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:  P7.17 Alt. 1  Chemical specifications of flame retardants in printed circuit boards >25g (without components):  TBBPA (additive) TBBPA (reactive) Other; chemical name: , CAS #:  Alt. 2  Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: FR(17)  P7.18 Alt. 1  Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:  Comment: No legal limits exist, this is a market requirement.  1. Chemical name: , CAS #:  2. Chemical name: , CAS #:  3. Chemical name: , CAS #:  3. Chemical name: , CAS #:  4. Alt. 2  Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR(17), FR(40)  P7.19 Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, R(17), FR(40)  P7.19 Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, R(17), FR(40)  P7.21 Of total plastic parts' weight >25g, recycled material content is 3.15%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  Batteries |        |  |             |                   |                   |
| P7.14 All cover/housing plastic parts >25g are free from chlorine and bromine.  P7.15 All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See Note B2)  P7.16 Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:  Marking: FR(40)  P7.17 Alt. 1  Chemical specifications of flame retardants in printed circuit boards >25g (without components):  TBBPA (additive), TBBPA (reactive), Other; chemical name:, CAS #:  Alt. 2  Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: FR(17)  P7.18 Alt. 1  Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:  Comment: No legal limits exist, this is a market requirement.  1. Chemical name:, CAS #:  2. Chemical name:, CAS #:  3. Chemical name:, CAS #:  3. Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4:  FR(17), FR(40)  P7.19 Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45,  R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)  P7.20 Of total plastic parts' weight >25g, inclosed material content is 3.15%.  P7.21 Of total plastic parts' weight >25g, inclosed material content is 3.15%.  P7.22 Light sources are free from mercury   | P7.12  | Electrical cable insulation materials of power cables are PVC free.  |             | $\boxtimes$       |                   |
| P7.15 All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See Note B2)  P7.16 Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:   | P7.13  | Electrical cable insulation materials of signal cables are PVC free  |             | $\boxtimes$       |                   |
| P7.16   Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:  | P7.14  |  |             |                   |                   |
| P7.16 Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:  Marking: FR(40)  P7.17 Alt. 1 Chemical specifications of flame retardants in printed circuit boards >25g (without components): TBBPA (additive)   | P7.15  |  | ÷           | $\boxtimes$       |                   |
| P7.17 Alt. 1 Chemical specifications of flame retardants in printed circuit boards >25g (without components): TBBPA (additive), TBBPA (reactive), Other; chemical name:, CAS #:  Alt. 2 Chemical specifications of flame retardants in printed circuit boards (without components) >25g according  | P7.16  | Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:  | X           |                   |                   |
| Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: FR(17)  P7.18 Alt. 1 Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%: Comment: No legal limits exist, this is a market requirement. 1. Chemical name: , CAS #: 2. Chemical name: , CAS #: 3. Chemical name: , CAS #: Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR(17), FR(40)  P7.19 Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)  P7.20 Of total plastic parts' weight >25g, recycled material content is 3.15%.  P7.21 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium  | P7.17  | Alt. 1 Chemical specifications of flame retardants in printed circuit boards >25g (without components): TBBPA (additive), TBBPA (reactive), Other; chemical name: , CAS #: |             |                   |                   |
| Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:  Comment: No legal limits exist, this is a market requirement.  1. Chemical name: , CAS #: 2. Chemical name: , CAS #: 3. Chemical name: , CAS #: Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR(17), FR(40)  P7.19 Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)  P7.20 Of total plastic parts' weight >25g, recycled material content is 3.15%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  Battery chemical composition: Lithium  |        | Chemical specifications of flame retardants in printed circuit boards (without components) >25g according  |             |                   |                   |
| 1. Chemical name: , CAS #: 2. Chemical name: , CAS #: 3. Chemical name: , CAS #: Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR(17), FR(40)  P7.19 Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)  P7.20 Of total plastic parts' weight >25g, recycled material content is 3.15%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium  | P7.18  | Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:  | ı 🗆         |                   |                   |
| Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4:  FR(17), FR(40)  P1.19 Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)  P7.20 Of total plastic parts' weight >25g, recycled material content is 3.15%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium   |        | 1. Chemical name: , CAS #: 2. Chemical name: , CAS #: 3. Chemical name: , CAS #:   |             |                   |                   |
| R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)  P7.20 Of total plastic parts' weight >25g, recycled material content is 3.15%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium  |        | Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR(17), FR(40)   |             |                   |                   |
| P7.20 Of total plastic parts' weight >25g, recycled material content is 3.15%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium   |        |  |             | $\boxtimes$       |                   |
| P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium  |        | Of total plastic parts' weight >25g, recycled material content is 3.15%.   |             |                   | -                 |
| If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium  |        |  |             |                   |                   |
| P8     Batteries       P8.1*     Battery chemical composition: Lithium   | P7.22  | Light sources are free from mercury  If mercury is used specify: Number of lamps: and may mercury content per lamp; may  | $\bowtie$   |                   |                   |
| P8.1* Battery chemical composition: <i>Lithium</i>   | P8     |  |             |                   |                   |
|  |        |  |             |                   |                   |
| Po.2 batteries meet the requirements of the following voluntary program/s:   | P8.2   | Batteries meet the requirements of the following voluntary program/s:  |             |                   | 一一                |

Note B2: IEC61249-2--21 has maximum limits for chlorine and bromine but does not address fluorine, iodine and astatine which are included in the group of halogens.

Note B3: 'Starting from January 2009, Risk phrases can be replaced by Hazard phrases according to the Globally Harmonized System (GHS), mandatory by December 2010.

| Model number * | bizhub C3100P | Logo |                |
|----------------|---------------|------|----------------|
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| Product environmental att   | ributes - Market re            | quirements (con         | itinued)                |   | Requirement             | met         |
|---|--------------------------------|-------------------------|-------------------------|---|-------------------------|-------------|
| Item  |                                |                         |                         |   | Yes No                  | n.a.        |
| P9 Energy consumpti   | ion                            |                         |                         |   |                         |             |
| 9.1 For the product the   | following power levels         | or energy consump       | otions are reported     | d:  |                         |             |
| Energy mode *   | Power level at 100 V AC        | Power level at 115 V AC | Power level<br>230 V AC | at Reference / Standard and test method * | for energy modes        |             |
| Maximum   | 1000 W                         | 1100 W                  | 1200 W                  | Corporated Standard                       | d                       |             |
| Active (Printing)   | <b>500</b> W                   | <b>490</b> W            | <b>470</b> W            | Energy Star                               | -                       |             |
| Ready   | <b>73</b> W                    | <b>71</b> W             | <b>77</b> W             | Energy Star                               |                         |             |
| Off/Sleep   | <b>2.64</b> W                  | 2.38 W                  | <b>2.86</b> W           | Energy Star                               |                         |             |
| Plug-in off   | 0.01 W                         | 0.01 W                  | 0.01 W                  | Energy Star                               |                         |             |
|   | W                              | W                       | W                       |   |                         |             |
| EPS No-load   | W                              | W                       | W                       |   |                         | X           |
| (External power supply / charger plugged in the wall outlet but disconnected from the product.) |                                |                         |                         |   |                         |             |
| PTEC * Typical Energy Consumption   | W                              | W                       | W                       |   |                         | $\boxtimes$ |
| TEC * Typical Energy Consumption  | 2.1 kWh/week                   | 2.2 kWh/week            | 2.1 kWh/week            | Energy Star                               |                         |             |
| ETEC * Annual Energy Consumption  | kWh/year                       | kWh/year                | kWh/year                |   |                         |             |
| Display resolution* : Me  | gapixels                       | l                       |                         |   |                         | $\boxtimes$ |
| Print Speed * : 31 Images   | s per minute                   |                         |                         |   |                         |             |
| Default time to enter energy say  | ve mode: minutes               |                         |                         |   |                         | П           |
|   | ne energy save functio         | n is provided with th   | ne product.             |   |                         | 片           |
|   | the energy requiremen          | *                       | *                       | c:  |                         | Ш           |
|   | version: <b>2.0</b> Tier: Prod |                         |                         | 3.  |                         |             |
| P10 Emissions   |                                |                         |                         |   |                         |             |
|   | Declared according to          | ISO 9296                |                         |   |                         |             |
| P10.1 Mode M  | lode description               |                         | Declared                | Declared A-wei                            |                         |             |
|   |                                |                         | A-weighted sound power  | sound pressure level                      | $L_{p{\sf Am}}$ (dB)    |             |
|   |                                |                         | level $L_{WAd}$ (B)     | Desktop (on                               | ystander positions    X |             |
|   |                                |                         |                         | or Desk side                              | porator attended)       |             |
|   | Ready                          |                         | * 4.6                   | 30.5                                      |                         |             |
| <u>'</u>  | Printing (b/w / color)         |                         | * 7.1 / 7.1             | 54.9 / 55.4                               | *                       | ┧Ш          |
| Other mode  | - t-                           | ECNA 74                 |                         |   |                         | -           |
| Measured according  | g to: SO7779 U                 |                         | MA-74 with Laser        | neasurement distance                      | m)                      |             |
| P10.2 The product meets   |                                |                         |                         | rogram/s: RAL-UZ171                       |                         | $\vdash$    |

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| Product environmental attributes - Market requirements (continued) |   |             |    | Requirement met |  |  |
|--|---|-------------|----|-----------------|--|--|
| Item   |   | Yes         | No | n.a.            |  |  |
|  | Chemical emissions from printing products   |             |    |                 |  |  |
| P10.3*   | Test performed according to ECMA-328 (ISO/IEC 28360) standard ☐, other specify: RAL-UZ171                         | $\boxtimes$ |    |                 |  |  |
| P10.4  | Typical emission rate (print phase) is (mg/h):  |             |    |                 |  |  |
|  | Dust 1.60/2.21 (b/w/color) Ozone 0.09/0.27 Styrene 0.302/0.986 Benzene 0.002/0.000 TVOC 3.570/9.368               |             |    |                 |  |  |
| P10.5  | Chemical emission requirements of the following columtary program/s <i>RAL UZ-171</i> are met for:                | $\boxtimes$ |    |                 |  |  |
|  | Dust ⊠ Ozon ⊠ Styrene ⊠ Benzene ⊠ TVOC ⊠  |             |    |                 |  |  |
|  | Electromagnetic emissions   |             |    |                 |  |  |
| P10.6  |   |             |    |                 |  |  |
| P11  | Consumable materials for printing products  |             |    |                 |  |  |
| P11.1*   | A Safety Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3).    | $\boxtimes$ |    |                 |  |  |
| P11.2*   | Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN12281.   |             |    |                 |  |  |
| P11.3*   | 2-sided (duplex) printing/copying is an integrated product function.  |             |    |                 |  |  |
| P12  | Ergonomics for computing products   |             |    |                 |  |  |
| P12.1*   | The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.                     |             |    | $\boxtimes$     |  |  |
| P12.2*   | * The physical input device meets the requirements of ISO 9995 and ISO 9241-410.                                  |             |    | $\boxtimes$     |  |  |
| P13  | Packaging and documentation   |             |    |                 |  |  |
| P13.1*   | Product packaging material type(s): <i>paper</i> weight (kg): 3.3   |             |    |                 |  |  |
|  | Product packaging material type(s): foamed PS weight (kg): 0.4  |             |    |                 |  |  |
| P13.2*   | Product packaging material type(s): <i>PE</i> weight (kg): <i>0.2</i> Product plastic packaging is free from PVC. |             |    |                 |  |  |
|  |   | $\boxtimes$ |    | Ш               |  |  |
| P13.3*   | Specify media for user and product documentation (tick box):  |             |    |                 |  |  |
|  | Electronic Paper Other O  |             |    |                 |  |  |
| P13.4*   | For paper user and product documentation, please specify contained percentage of post-consumer recycled fiber: 0% |             |    |                 |  |  |
| P14  | Additional information (See Note B4)  |             |    |                 |  |  |
| BTU  | 44.7 BTU/h The figure is based on the TEC value of 2.2 kWh / week (=24 h x 7 days)                                |             |    |                 |  |  |
| (115v)   |   |             |    |                 |  |  |
| BTU<br>(230v)  | 42.7 BTU/h The figure is based on the TEC value of 2.1 kWh / week (=24 h x 7 days)                                |             |    |                 |  |  |
| (230V)   |   |             |    |                 |  |  |
|  |   |             |    |                 |  |  |

Note B4: Additional lines may be inserted to declare further items, by positioning the cursor at the far right of the row and hitting the <Enter> key.

## Legal references Europe Annex B

| Reference  | Declaration item             |
|--|------------------------------|
| 2002/95/EC (ROHS Directive)  | P1.1, P4.1                   |
| REACH, Annex XVII  | P1.6, P1.8, P4.2             |
| REACH, Annex XVII  | P1.4                         |
| REACH, Annex XVII  | P1.2                         |
| REACH, Annex XVII  | P1.7                         |
| REACH, Annex XVII  | P1.9                         |
| Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000  | P1.3                         |
| Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002 | P1.5                         |
| 2006/66/EC (Battery and accumulators Directive)  | P2.1, P2.2, P2,3, P3.4, P8.1 |
| 2006/95/EC (Low Voltage Directive)   | P3.1, 3.4                    |
| 2004/108/EEC (New EMC Directive)   | P3.2, 3.4                    |
| 1999/5/EC (R&TTE Directive)  | P3.3, 3.4                    |
| "REACH" Regulation (1907/2006), annex VII  | P1.10                        |
| (EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)                       | P4.3                         |
| REACH article 31, annex II   | P4.3                         |
| 2004/12/EC (Directive on packaging and packaging waste)  | P5.1                         |
| (97/129/EC) (Commission Decision on Identification<br>System for Packaging Materials               | P5.2                         |
| 2037/2000/EC Regulation on Substances that Deplete the Ozone Layer                                 | P5.3                         |
| 2002/96/EC (WEEE directive)  | P3.4, P6.1                   |
| (EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)                       | P7.19                        |