

ENVIRONMENTAL PRODUCT DECLARATION

LASER PRINTER CS820DE

According to ISO 14025



High-performance workgroup printing and professional-quality color distinguish the Lexmark CS820, making it not just the fastest letter/ A4 format color laser printer in its class*, but the best value in features, supplies and service. The CS820 can print one color page as fast as 7 seconds. In fact, it can often print short jobs before a user gets up from their chair, and minimizes waiting time when printing is initiated from the touch screen.



Lexmark's innovative imaging solutions and technologies help customers worldwide print, secure and manage information with ease, efficiency and unmatched value. Lexmark simplifies the complex intersection of digital and printed information.

As part of the commitment to our customers, Lexmark performs Life Cycle Analysis on our products. The results of the LCA analysis continues to assist Lexmark in reducing the environmental impact of the hardware, software and services offered to our customers.



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This declaration is an environmental product declaration (EPD) in accordance with ISO 14025. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycle. Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity.



EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc. Accuracy of Results: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact. Comparability: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.

PROGRAM OPERATOR	UL Solutions
DECLARATION HOLDER	Lexmark
DECLARATION NUMBER	4790837277.105.1
DECLARED PRODUCT	Laser Printer CS820de
REFERENCE PCR	ULE (2018) Product Category Rules for preparing an environmental product declaration (EPD) for printers and multi-function printing units (v2.0). UL Environment
DATE OF ISSUE	August 1, 2023
PERIOD OF VALIDITY	5 Years
CONTENTS OF THE DECLARATION	Product definition Information about basic material and the material's origin Description of the product's manufacture Indication of product processing Information about the in-use conditions Life cycle assessment results Testing results and verifications
The PCR review was conducted by:	UL Environment Review Panel Lise Laurin (Chairperson) 31 Leach Road; Kittery, Maine 03904; lise@earthshift.com
This declaration was independently verified in accordance with ISO 14025 by Underwriters Laboratories <input type="checkbox"/> INTERNAL <input checked="" type="checkbox"/> EXTERNAL	<i>Cooper McCollum</i> Cooper McCollum, UL Solutions
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:	<i>Thomas P. Gloria</i> Thomas P. Gloria, Industrial Ecology Consultants

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Product Description

Product Type	Color Laser Printer
Printer Model	CS820de
Maximum Print Speed	60 pages per minute
Intended use	primarily office
Range of applications	print images or text in mono onto paper or paper-like media
Product Lifetime	5 years
Introduction Date	2/17/2016
Product Specifications	http://www.lexmark.com/en_US/products/series/printer-and-multifunction/finder.shtml
Functional Unit	The functional unit has been defined as a 1,000 page simplex job in accordance with the Energy Star Typical Energy Consumption test procedure and the reference Product Category Rule (PCR).
Scope of Validity / Applicability	The EPD is representative for the printer model CS820de sold as a stand-alone unit. This EPD and the reference PCR are applicable for printer sale and use in the North American market. Lexmark cannot guarantee that comparisons with EPDs of competitive products will be valid.
Product Characterization	<p>The CS820 is the fastest letter/A4 format color laser printer in its class, and the first and only letter/ A4 color laser printer to break the 60 ppm speed barrier. Even large color print jobs complete quickly so users are more productive. With a 1.33 GHz quad-core processor and 1 GB of standard memory, the CS820 has a powerful print controller to handle complex color jobs with large, high-resolution photos and graphics spanning many pages. Its exclusive high-performance graphics chip drives real productivity. The printer product delivered to the customer consists of the printer, a power cord, printed setup instructions, a hyperlink that directs customers to the User Guide and Printer Drivers and an initial set of product supplies. The printer is delivered in packaging that can be recycled locally and is not needed for product operation. Product supplies include toner cartridges, imaging kits and the fusing mechanism. The power supply is internal to the product and the imaging kit and fusing mechanism are installed at the factory. Only the toner cartridges must be installed by the customer. The printer can be setup by the customer without outside assistance.</p>

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Technical Data

Product specifications	Lexmark CS820de	Lexmark CS820dte	Lexmark CS820dtfe
Printing			
Display	Lexmark e-Task 4.3-inch (10.9 cm) color touch screen		
Print Speed: Up to ¹	Black: 60 ppm / Color: 60 ppm		
Time to First Page: As fast as	Black: 7 seconds / Color: 7 seconds		
Print Resolution	Black: 1200 x 1200 dpi, 4800 Color Quality (2400 x 600 dpi) / Color: 1200 x 1200 dpi, 4800 Color Quality (2400 x 600 dpi)		
Memory	Standard: 1024 MB / Maximum: 3072 MB		
Hard Disk	Option available		
Recommended Monthly Page Volume ²	2500 - 25000 pages		
Maximum Monthly Duty Cycle: Up to ³	200000 pages per month		
Supplies²			
Laser Cartridge Yields (up to) ⁴	22,000-page Colour (CMY) Extra High Yield Cartridges, 33,000-page Black Extra High Yield Cartridge, 6,000-page Black and Colour (CMYK) Cartridges		
Photoconductor Estimated Yield: Up to ⁴	175000 pages, based on 3 average letter/A4-size pages per print job and ~ 5% coverage		
Developer Unit(s) Estimated Yield: Up to ⁴	300000 pages, based on 3 average letter/A4-size pages per print job and ~ 5% coverage		
Cartridge(s) Shipping with Product ⁵	6,000-page Black and Colour (CMYK) Return Program Toner Cartridges		
Paper Handling			
Included Paper Handling	350-Sheet Input, 100-Sheet Multipurpose Feeder, Integrated Duplex, 500-Sheet Output Bin	350-Sheet Input, 100-Sheet Multipurpose Feeder, Integrated Duplex, 500-Sheet Tray, 500-Sheet Output Bin	350-Sheet Input, 100-Sheet Multipurpose Feeder, Integrated Duplex, 500-Sheet Tray, 500-Sheet Output Bin, Inline Stapler
Optional Paper Handling	350-Sheet Tray, Inline Stapler, 2200-Sheet Tray		500-Sheet Tray, 2200-Sheet Tray
Paper Input Capacity: Up to	Standard: 650 pages 20 lb or 75 gsm bond / Maximum: 4500 pages 20 lb or 75 gsm bond	Standard: 1200 pages 20 lb or 75 gsm bond / Maximum: 4500 pages 20 lb or 75 gsm bond	Standard: 300 pages 20 lb or 75 gsm bond / Maximum: 300 pages 20 lb or 75 gsm bond
Paper Output Capacity: Up to	Standard: 500 pages 20 lb or 75 gsm bond / Maximum: 500 pages 20 lb or 75 gsm bond		Standard: 300 pages 20 lb or 75 gsm bond / Maximum: 300 pages 20 lb or 75 gsm bond
Media Types Supported	Card Stock, Dual Web Labels, Envelopes, Labels, Plain Paper, Polyester Labels, Vinyl Labels, Banner Paper, Refer to the Paper & Specialty Media Guide		
Media Sizes Supported	10 Envelope, 7 3/4 Envelope, 9 Envelope, A4, A5, B5 Envelope, C4 Envelope, C5 Envelope, DL Envelope, Index Card, Executive, Folio, JIS-B5, Legal, Letter, 4 x 6", Statement, Universal, Office, A0		
General Information⁶			
Standard Ports	One Internal Card Slot, USB 2.0 Specification Hi-Speed Certified (Type B), Gigabit Ethernet (10/100/1000), Front USB 2.0 Specification Hi-Speed Certified port (Type A), Two Rear USB 2.0 Specification Hi-Speed Certified ports (Type A)		
Optional Network Ports	Internal MarkNet N8360 802.11b/g/n Wireless, NFC		
Noise Level: Operating	Print: 56 dBA		
Specified Operating Environment	Humidity: 15 to 80% Relative Humidity, Temperature: 10 to 32°C (50 to 90°F), Altitude: 0 - 2890 Meters (9,500 Feet)		
Limited Warranty - See Statement of Limited Warranty	1-Year Onsite Service, Next Business Day		
Size (in. - H x W x D) / Weight (lb.)	21.12 x 22 x 20.6 in. / 137 lb.	25.8 x 22 x 20.6 in. / 156 lb.	27.17 x 25.43 x 20.6 in. / 167 lb.

¹Average continuous black or continuous composite CMY declared cartridge yield up to this number of standard pages in accordance with ISO/IEC 19798. ²Recommended Monthly Page Volume² is a range of pages that helps customers evaluate Lexmark's product offerings based on the average number of pages customers plan to print on the device each month. Lexmark recommends that the number of pages per month be within the stated range for optimum device performance, based on factors including: supplies replacement intervals, paper loading intervals, speed, and typical customer usage. ³Maximum Monthly Duty Cycle is defined as the maximum number of pages a device could deliver in a month using a multistep operation. This metric provides a comparison of robustness in relation to other Lexmark printers and MFPs. ⁴Printers are sold subject to certain license/agreement conditions. See www.lexmark.com/printlicense for details. ⁵Actual yield may vary based on other factors such as device speed, paper size and feed orientation, toner coverage, tray source, percentage of black-only printing and average print job complexity. ⁶Print and copy speeds measured in accordance with ISO/IEC 24734 and ISO/IEC 24735 respectively (ESAT). For more information see: www.lexmark.com/ISOspeeds. ⁷Product functions only with replacement cartridges designed for use in a specific geographical region. See www.lexmark.com/regions for more details.

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System Boundary

The study considers all phases of the life cycle, as shown below.

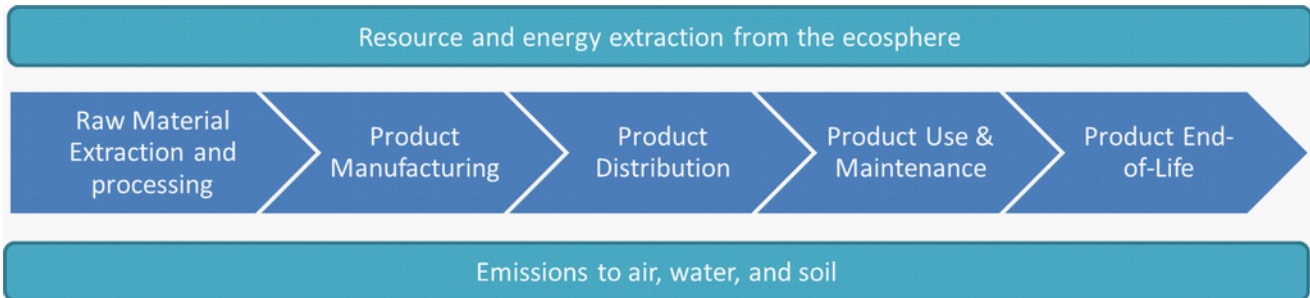


Figure 1: System Boundaries

Declaration of Basic Materials

The printer consist of mechanical, electromechanical, and electronic components. Its material composition can be described using the basic material fractions given below. Please note that the category 'Electronics' also includes all wiring.

Material	Mass (kg)
Plastics (recyclable)	17.9
Plastics (non-recyclable)	5.23
Ferrous Metals	32.7
Aluminum	0.674
Copper	0
Glass	0
Electronics	3.71
Other Materials	0.36

Table 1: Basic Material Declaration

Product Supply Chain

The printer is manufactured and assembled in Southeast China. The cartridges for the North American market are manufactured and assembled in Juarez, Mexico.

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Life Cycle Assessment Results

The following sections describe the printer's potential environmental impacts over the full printer life cycle. These represent the typical impacts for an average system sold in the North American market. All impacts are presented per functional unit of printing 1,000 images of the reference standard.

Manufacturing Material and Resources Inventory

Table 2 displays the use of material resources (kg) and of non-renewable as well as renewable primary energy demand necessary for printer manufacturing, but excludes other life cycle stages of the printer (cradle-to-gate). Likewise, material and energy consumption associated with printer packaging, cartridges, and paper is excluded here.

Use of Material Resources [kg]	
Non-Renewable	3.07E003
Renewable (excl. water)	5.24E003
Water	4.58E005
Use of Non-Renewable Primary Energy [MJ]	
Crude Oil	1.08E003
Hard Coal	3.69E003
Lignite	136
Natural Gas	2.11E003
Uranium	387
Use of Renewable Primary Energy [MJ]	
Biomass	0.0961
Geothermal	8.43
Solar	497
Wind	240
Hydropower	325

Table 2: Use of Material and Energy Resources for Printer Manufacturing (Cradle-to-Gate)

Energy Consumption During Utilization

Based on the EnergyStar Typical Energy Consumption (TEC) test methodology, the printer is expected to have the following power consumption for an assumed average job load.

	Per 1,000 page	Per product lifetime
Energy Consumption During Utilization [kWh]	0.0993	231

Table 3: At-wall power consumption during utilization

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Life Cycle Impact Assessment

The following provides an overview of the potential printer life cycle impacts with emissions classified and characterized to standard environmental impact metrics using the ReCiPe 2016 Hierarchist (H) midpoint characterization factors (v1.1).

Note that the mineral resource depletion results do not include any contributions from the paper life cycle as the AF&PA report does not allow for the conversion to ReCiPe 2016.

Ecotoxicity and human health are not included in this study, as per the PCR, due to their respective uncertainties.

LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.

	per 1000 pages including paper	per 1000 pages excluding paper	per printer lifetime including paper	per printer lifetime excluding paper
Global Warming Potential [kg CO ₂ eq.]	5.58E02	5.52E02	1.89E04	4.06E03
Ozone Depletion Potential [kg CFC-11 eq.]	1.19E-04	1.19E-04	1.61E-03	1.61E-03
Acidification Potential [kg SO ₂ eq.]	2.84E00	2.84E00	1.25E01	1.25E01
Eutrophication Potential [kg P eq.]	2.34E-03	2.34E-03	3.97E-02	3.97E-02
Fossil Fuel Depletion Potential [kg oil eq.]	1.72E02	1.72E02	1.58E03	1.58E03
Mineral Resource Depletion Potential [kg Cu eq.]	2.56E01	2.56E01	5.39E01	5.39E01

Table 3: Summary of Life Cycle Impact Assessment Results

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Interpretation of Results

Dominance Analysis

Due to the 5 year lifetime and the number of pages printed per day as established by the Energy Star Typical Energy Consumption test procedure, the use phase heavily dominates the life cycle impacts. The below tables and charts display the results of the dominance analysis for each impact category addressed in Table 3.

Global Warming Potential

	per 1000 pages including paper	per 1000 pages excluding paper	per printer lifetime including paper	per printer lifetime excluding paper
Printer	2.34E-01	2.34E-01	5.45E+02	5.45E+02
Lexmark use phase <LC>	7.90E+00	1.51E+00	1.84E+04	3.51E+03
Lexmark EoL phase <LC>	2.08E-03	2.08E-03	4.85E+00	4.85E+00

Table 4: Fossil GWP100 dominance analysis [kg CO2 equiv]

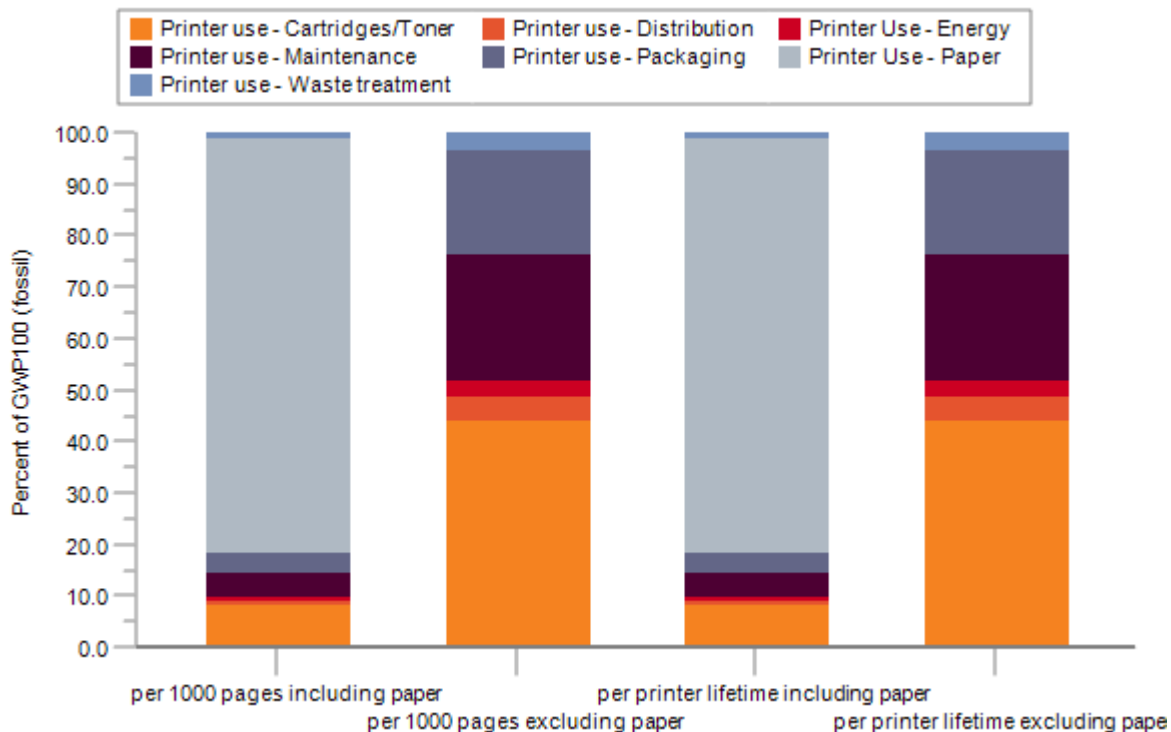


Figure 1: Fossil GWP100 dominance analysis of the use phase

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Ozone Depletion Potential

	per 1000 pages including paper	per 1000 pages excluding paper	per printer lifetime including paper	per printer lifetime excluding paper
Printer	5.07E-08	5.07E-08	1.18E-04	1.18E-04
Lexmark use phase <LC>	6.40E-07	6.40E-07	1.49E-03	1.49E-03
Lexmark EoL phase <LC>	2.15E-10	2.15E-10	5.00E-07	5.00E-07

Table 5: ODP dominance analysis [kg CFC-11 equiv]

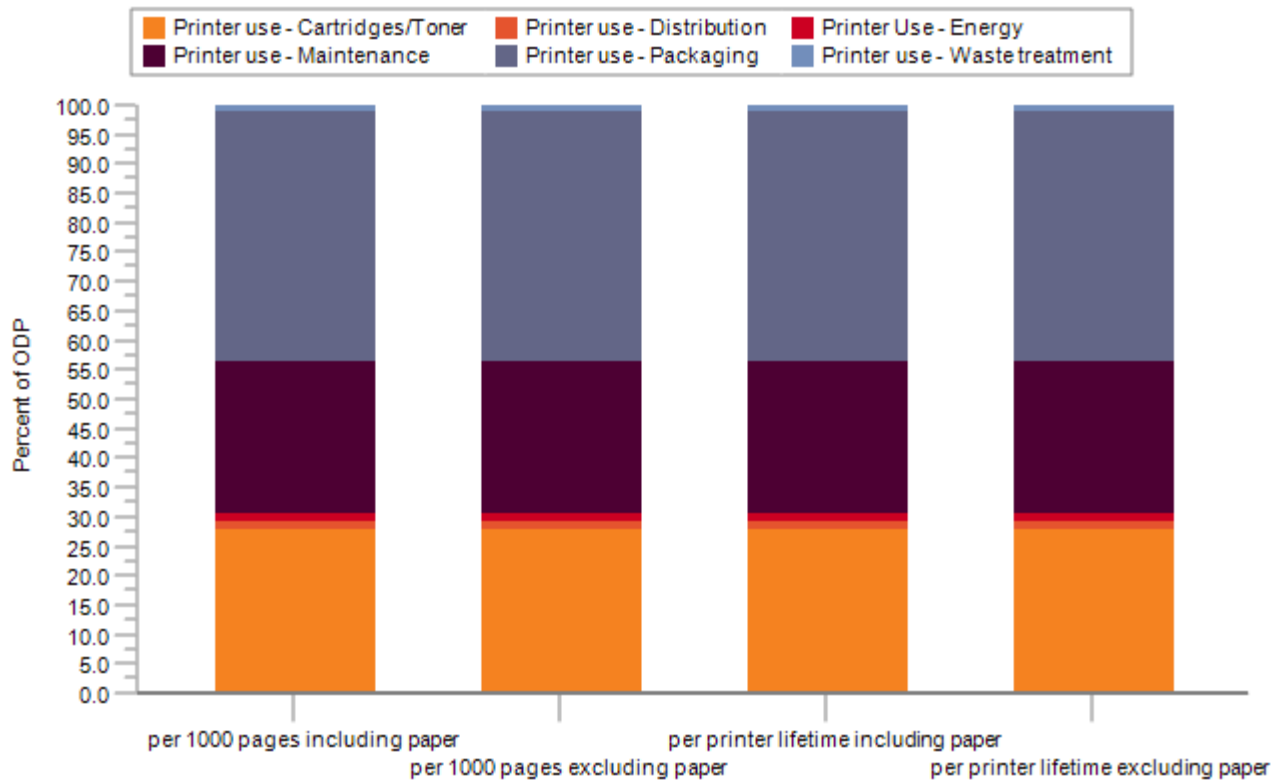


Figure 2: ODP dominance analysis of the use phase

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Acidification Potential

	per 1000 pages including paper	per 1000 pages excluding paper	per printer lifetime including paper	per printer lifetime excluding paper
Printer	1.21E-03	1.21E-03	2.83E+00	2.83E+00
Lexmark use phase <LC>	4.15E-03	4.15E-03	9.67E+00	9.67E+00
Lexmark EoL phase <LC>	5.07E-06	5.07E-06	1.18E-02	1.18E-02

Table 6: AP dominance analysis [kg SO₂ equiv]

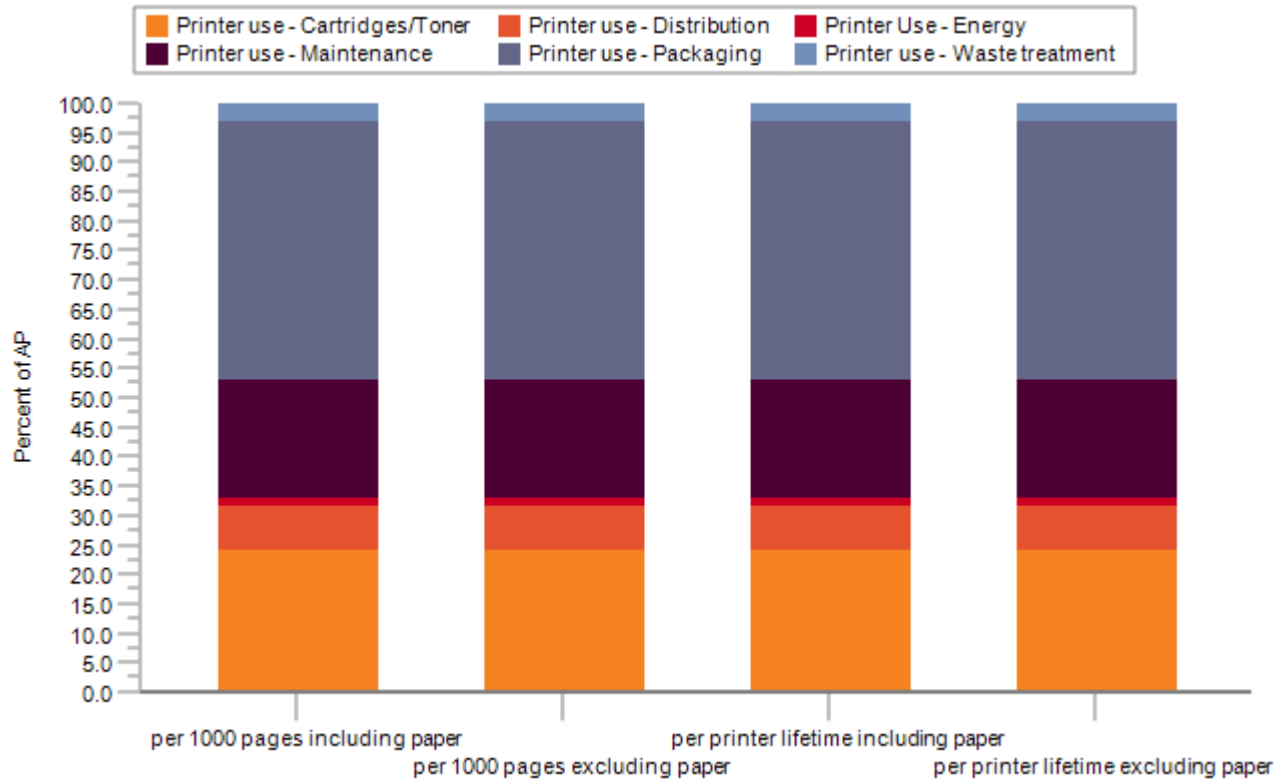


Figure 3: AP dominance analysis of the use phase

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Eutrophication Potential

	per 1000 pages including paper	per 1000 pages excluding paper	per printer lifetime including paper	per printer lifetime excluding paper
Printer	9.92E-07	9.92E-07	2.31E-03	2.31E-03
Lexmark use phase <LC>	1.60E-05	1.60E-05	3.73E-02	3.73E-02
Lexmark EoL phase <LC>	8.97E-09	8.97E-09	2.09E-05	2.09E-05

Table 8: EP dominance analysis [kg P equiv]

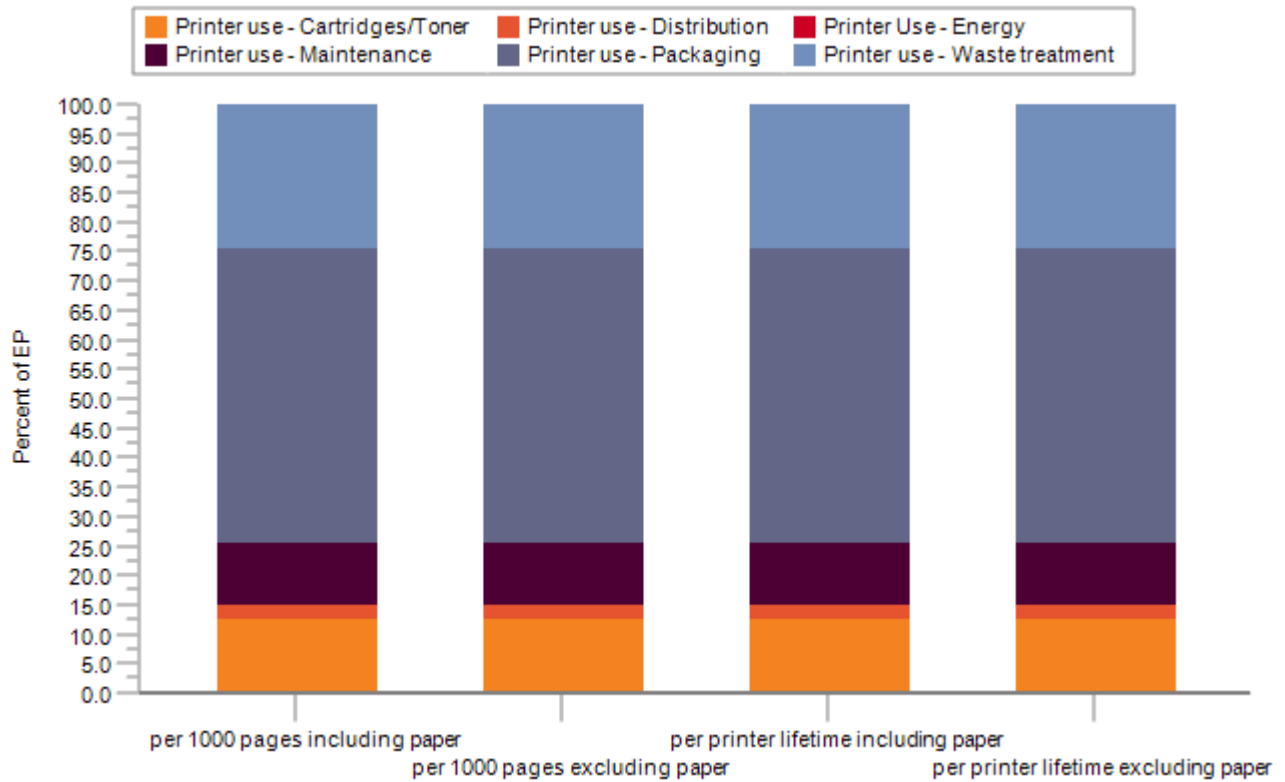


Figure 4: EP dominance analysis of the use phase

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Fossil Fuel Depletion Potential

	per 1000 pages including paper	per 1000 pages excluding paper	per printer lifetime including paper	per printer lifetime excluding paper
Printer	7.30E-02	7.30E-02	1.70E+02	1.70E+02
Lexmark use phase <LC>	6.05E-01	6.05E-01	1.41E+03	1.41E+03
Lexmark EoL phase <LC>	6.91E-04	6.91E-04	1.61E+00	1.61E+00

Table 9: Fossil fuel depletion dominance analysis [kg oil equiv]

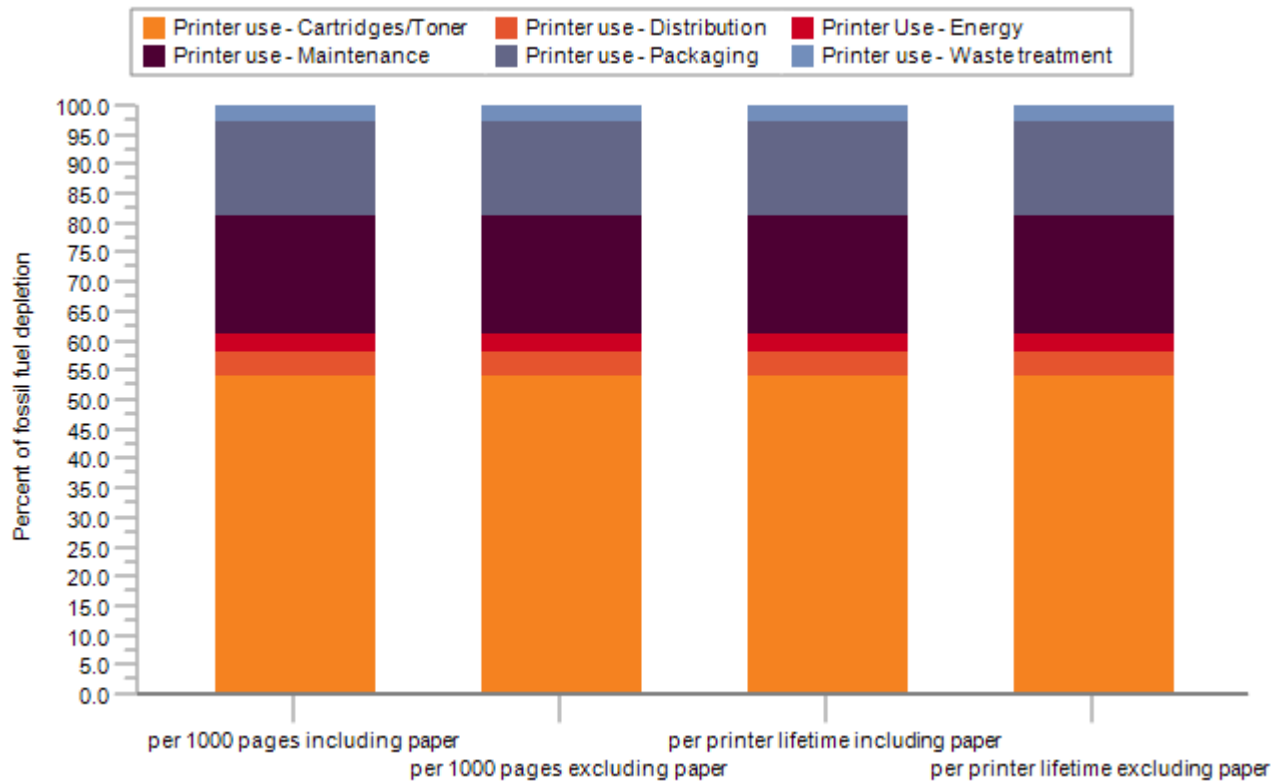


Figure 5: Fossil resource depletion dominance analysis of the use phase

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Mineral Resource Depletion Potential

	per 1000 pages including paper	per 1000 pages excluding paper	per printer lifetime including paper	per printer lifetime excluding paper
Printer	1.10E-02	1.10E-02	2.56E+01	2.56E+01
Lexmark use phase <LC>	1.21E-02	1.21E-02	2.83E+01	2.83E+01
Lexmark EoL phase <LC>	1.64E-05	1.64E-05	3.83E-02	3.83E-02

Table 10: Mineral resource depletion dominance analysis [MJ surplus]

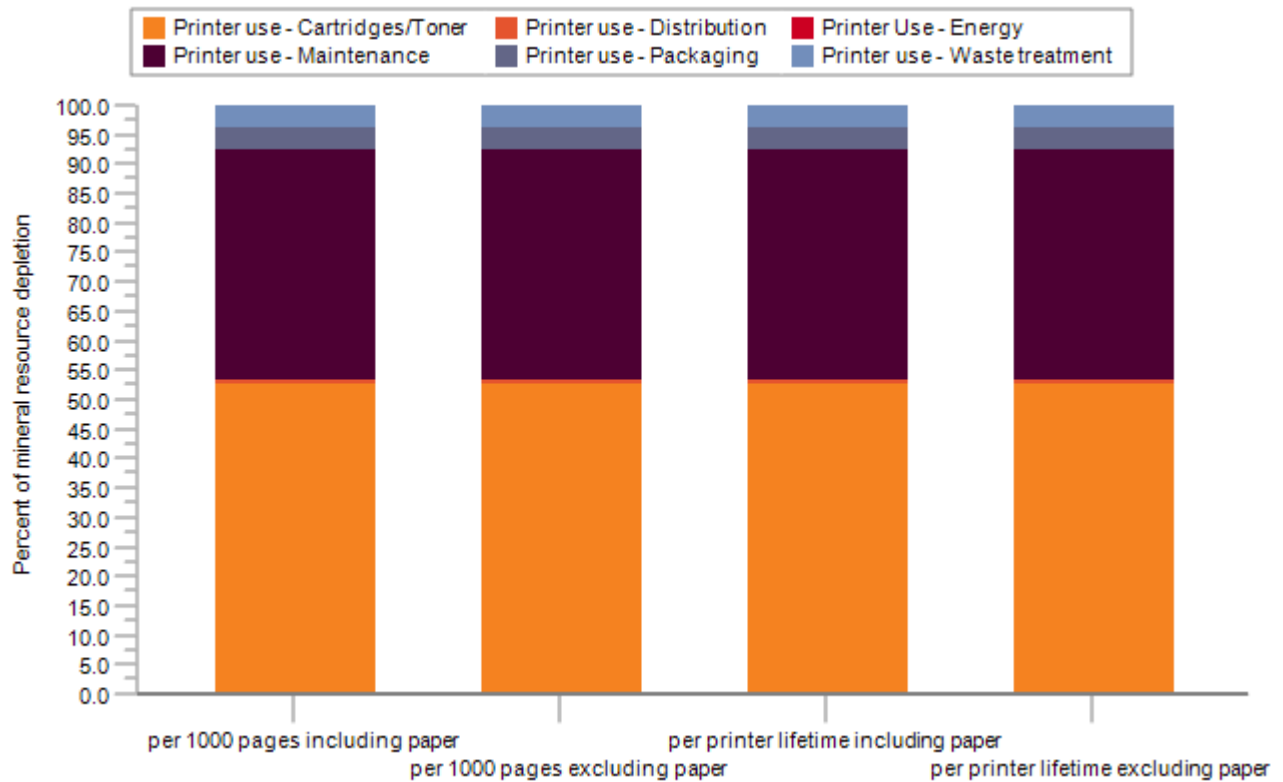


Figure 6: Mineral resource depletion dominance analysis of the use phase

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Primary Energy Demand from Renewable and Non-renewable Resources

	per 1000 pages including paper	per 1000 pages excluding paper	per printer lifetime including paper	per printer lifetime excluding paper
Printer	3.63E+00	3.63E+00	8.46E+03	8.46E+03
Lexmark use phase <LC>	7.43E+01	2.78E+01	1.73E+05	6.48E+04
Lexmark EoL phase <LC>	3.15E-02	3.15E-02	7.33E+01	7.33E+01

Table 11: PED dominance analysis [MJ]

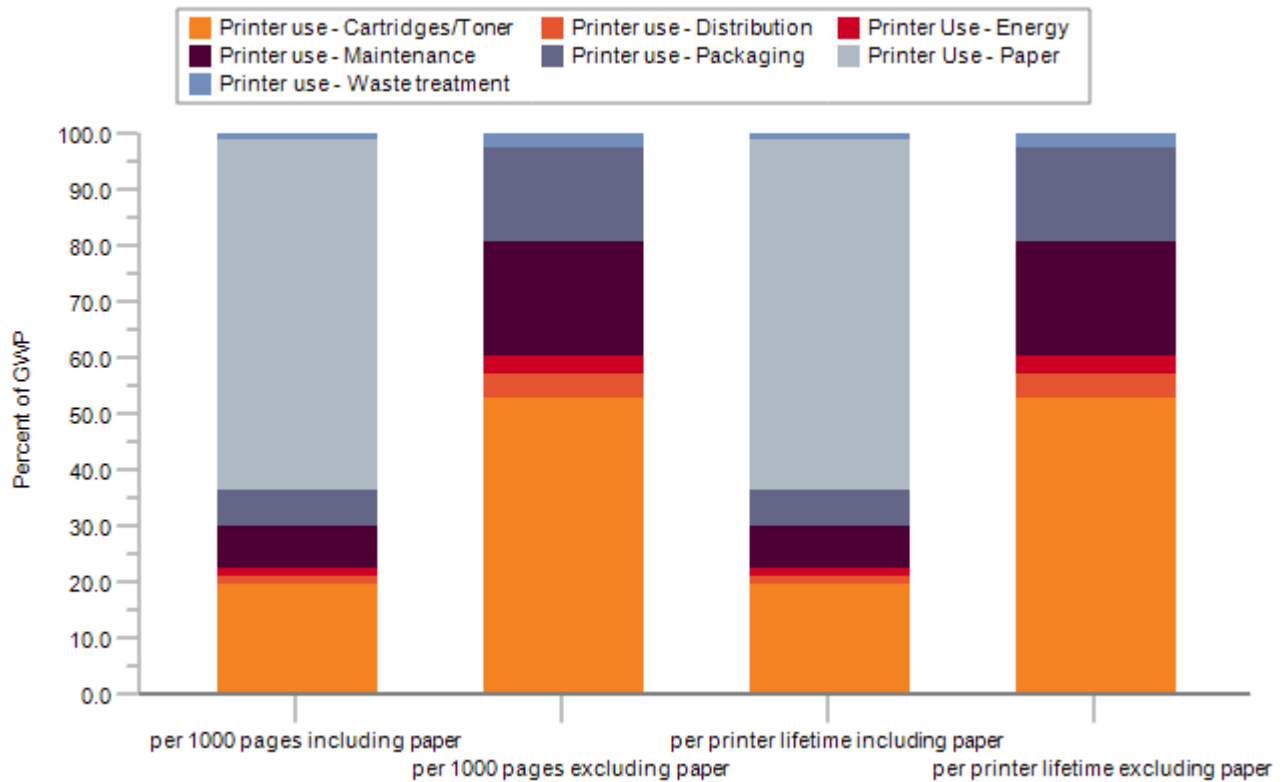


Figure 7: PED dominance analysis of the use phase

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Assumptions and Estimations

Assumptions and estimations follow the governing PCR on printing equipment. Full details are documented in the EPD's background report, which was provided for verification purposes alongside the EPD. The LCA results represent the specific printer model as sold in the North American market.

In line with the PCR, the model assumes a printer lifetime of five (5) years. The printer is modeled to print an average of 1.79E003 pages per day based on a maximum print speed of 60 images per minute. The printer further possesses an automatic mechanic duplexing feature.

Power consumption figures are based on Energy Star testing of the printer using the average job load described above. Consumables consumption is based on the market-average yield across all available cartridge capacities. In addition, market-average use of remanufactured cartridges is taken into account, as applicable.

Transportation distances to the end consumer are based on their points of origin and the population-weighted average distance to the 100 most populous cities in the continental US based on 2010 census data. The printer as well as replacement fuser kits and waste toner bottles are manufactured in China and shipped to the point of use from the distribution center near Memphis, TN, while the cartridges and the imaging unit are shipped from Ciudad Juarez, MX.

The LCI data for office paper is adopted from the uncoated, free sheet paper inventory developed by the American Forest & Paper Association (AF&PA). This paper dataset assumes that average office paper contains 4% recycled content. The mass of consumed paper is based on the US letter format and a surface weight of 75 g/m². The AF&PA data includes paper production, transportation, and End-of-Life treatment (72% recycling, 23% landfill, 5% incineration).

The End-of-Life treatment for the printer is based on the assumption that 66.7 % of the printers are returned to Lexmark for recycling, while the remainder is disposed of through local waste streams, where the metal fractions are assumed to be recycled and the remainder landfilled. The EoL cartridges are assumed to go to remanufacturing, recycling, and landfill in equal shares.

In accordance with the cut-off methodology prescribed by the governing PCR, materials sent to End-of-Life recycling are considered to cross the system boundary without any further transformation. Only the impacts associated with waste transportation and disposal are included in the results.

Description of Data and Period Under Consideration

All primary data is based on technical documentation and sales data accessed in 2022. All background data is taken from the GaBi 2022-10.6.2.9 Databases. No primary data is collected from the Original Equipment Manufacturer's manufacturing plant.

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Data Quality

Manufacturing data of printers and consumables is based on a combination of Bills of Material and teardown analyses and is considered to be of overall high quality with low uncertainty. Distribution from printer manufacturing to the end consumer is representative of logistical data from Lexmark and best estimates of US average shipping distances, and is of moderate quality and high uncertainty.

Printer power consumption represents measured power consumed during printer operation in accordance with the use scenario outlined in the reference PCR and is of high quality and moderate uncertainty; actual print loads may differ. Toner cartridge use is based on expected yields based on the ISO test standards for cartridge use, and is of high quality and low uncertainty. Replacement rate for consumable parts is based on part design specifications, and is of high quality and moderate uncertainty.

The disposition of the printer and consumables at End-of-Life is based on best-available information by the respective experts at Lexmark. This data is of average quality and moderate uncertainty.

Background Data

All background datasets relevant to production, power generation, transportation, and material disposal were taken from the GaBi 2022-10.6.2.9 Databases.

The data used for office paper is based on the data developed for the American Forest & Paper Association (AF&PA) and is representative for average North American office paper production in 2010.

The additional use of third-party background data from industry associations (e.g., worldsteel) is documented in the background report. They represent the latest LCI data as available in the GaBi 2022-10.6.2.9 Databases.

Allocation and Methodological Principles

No significant allocations have been considered for the production of the printer. Allocation of production or use impacts across the various functions of a multi-function system is not included (i.e., allocation of production impacts to the provision of scanning services) and the impacts from all life cycle stages are considered within the system boundaries for the printing system.

Treatment of recycled or resold material is not considered in the body of the EPD, in accordance with the cut-off methodology required by the governing PCR.

A description of all of the methodological decisions made in modeling the life cycle impacts of office paper, including descriptions of the approach to modeling carbon sequestration and paper recycling, are described in the American Forestry & Paper Association's LCA report on printing and writing papers.

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Additional Environmental Information

As required by the governing PCR, the assessment of human toxicity and ecotoxicity shall be included in this additional information section. The following metrics, which are based on the scenario 'per printer lifetime including paper' can help identify toxicity hot spots, but decision-making should also consider an exposure assessment.

	USEtox - Ecotoxicity [CTUe]	USEtox - Human toxicity (cancer) [CTUh]	USEtox - Human toxicity (non-cancer) [CTUh]
Printer use - Cartridges/Toner	3.02E01	4.94E-06	8.79E-09
Printer use - Distribution	5.48E-01	1.04E-09	2.30E-10
Printer Use - Energy	6.49E-02	7.35E-09	1.38E-10
Printer use - Maintenance	6.11E00	2.10E-06	3.73E-09
Printer use - Packaging	1.21E00	1.18E-07	9.78E-07
Printer use - Waste treatment	3.06E-01	7.00E-10	1.33E-10

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References and Standards

- EPA (2013) ENERGY STAR Program Requirements for Imaging Equipment – Test Method (Rev. Jun-2013)
https://www.energystar.gov/sites/default/files/FINAL%20Version%202.0%20Imaging%20Equipment%20Program%20Requirements%20%28Rev%20Oct-2014%29_0.pdf
- ISO (2006a) ISO 14025: Environmental labels and declarations – Type III environmental declarations – Principles and procedures. International Organization for Standardization. Geneva.
- ISO (2006b) ISO 14040: Environmental management - Life cycle assessment – Principles and framework. International Organization for Standardization. Geneva.
- ISO (2006c) ISO 14044: Environmental management - Life cycle assessment – Requirements and guidelines. International Organization for Standardization. Geneva.
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- thinkstep (2018) GaBi ts Product Sustainability Software. thinkstep AG, Leinfelden-Echterdingen. <http://www.gabi-software.com>
- ReCiPe (2016) *ReCiPe* methodology for Life Cycle Impact Assessment, version 1.1. Available at www.lcia-recipe.net
- ULE (2018) Product Category Rules for preparing an environmental product declaration (EPD) for printers and multi-function printing units (v2.0). UL Environment. Washington, DC.

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Dr. Gloria is a certified Life Cycle Professional (LCACP) through the American Center for Life Cycle Assessment.

ENVIRONMENTAL PRODUCT DECLARATION



Laser Printer CS820de
Printers and multi-functional printing units

According to ISO 14025

EU REACH (EC1907/2006) Substances of Very High Concern Disclosure



As a producer and supplier of articles Lexmark International, Inc. (Lexmark) has an obligation under Article 33 of the REACH Regulation (EC 1907/2006) to communicate information on Substances of Very High Concern (SVHC) present in a concentration greater than 0.1% weight by weight of that article.

A complete list of the candidate list of Substances of Very High Concern is found on the European Chemicals Agency web site: <https://echa.europa.eu/candidate-list-table>

Company:

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1095 Budapest
HUNGARY
Contact: Sustainability@lexmark.com

Lexmark declares that the products listed below are free of substances listed on the Candidate List of Substances of Very High Concern in a concentration above 0.1% weight by weight of that article as of the date of this disclosure except as listed below. Any substances listed below may be contained in articles above the threshold level. None are expected to be released from the component parts identified or to result in exposure during normal and expected use of Lexmark Imaging Equipment.

Scope of Disclosure:

All Printing and Imaging Equipment under the Lexmark Brand, including options and service parts.

Note: Cartridge and Imaging Unit supplies do not contain any SVHC substances.

Substance Name	EC Number	CAS Number	Endocrine Disruptor?	Use Cases
1,2-dimethoxyethane	203-794-9	110-71-4	No	Coin cell battery electrolyte. Battery found on main printed circuit board
Lead	231-100-4	7439-92-1	No	Found in some high temperature solder, some machining steels (shafts/roller), some Brass parts
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	25973-55-1	No	found in the Display (Operator Panel)
Lead monoxide (lead oxide)	215-267-0	1317-36-8	No	leaded glass used in circuit boards, capacitors and ceramic heaters
Diboron trioxide	215-125-8	1303-86-2	No	found in ceramic heaters
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	204-327-1	119-47-1	No	Paper pick roll

Note: Previous declarations included 3 substances in a printhead adhesive. Although present in the adhesive formulation, these substances react upon curing and are present only in residual levels below 1000 ppm in the final product.

Lexmark includes requirements for the disclosure of substances on the Candidate List of Substances of Very High Concern in agreements with our suppliers, per the [Lexmark Environmental Product Specification](#).

The statements in this disclosure are declared to be true and accurate to the knowledge of Lexmark as of the date of this disclosure. This disclosure is subject to change based on Lexmark receiving updated information from suppliers, changes to the product or the addition of new substances on the Candidate List of Substances of Very High Concern.

Christina Cullins
WW Materials Compliance Manager
Corporate Sustainability Group
Lexmark International Inc.

Date of Disclosure: July 7, 2022