SuMPO EPD JAPAN VERIFIED

SuMPO EPD Japan

Third party verified

Environmental Product Declaration

In Conformance with

ISO14025 | ISO14040 | ISO14044

RICOH imagine. change.

PFU Limited

RICOH SP-2240N Made in Japan

Registration number	Verificartion date	Publication date	Expiration date	EPD type
SuMPO-EPD-2601-68-1	2026 /1/8	2026/6/17 * First publication date	2031/1/7	Single Product EPD

Additional standards in conformance

Not Applicable

EPD can be updated or withdrawn during the validity period. To confirm the validity of this EPD, check the following website:
https://ecoleaf-label.jp/epd/search

●General Information

＞Programme

Programme name	SuMPO EPD Japan
Programme operator	Sustainable Management Promotion Organization (SuMPO)
Address	KANDA SQUARE GATE 4F 14-8, Uchikanda 1-chome, Chiyoda-ku, Tokyo, 101-0047, Japan
Website	https://ecoleaf-label.jp

＞GPI and PCR

GPI	SuMPO EPD Japan General Program Instructions v.2.1.1
PCR name	Imaging input and/or output equipment
PCR registration number	PA-590000-AI-08
PCR publication date	09/01/2023
PCR review panel chair	Masayuki Kanzaki（SuMPO）
PCR valid until	08/31/2028
PCR issuer	Sustainable Management Promotion Organization (SuMPO)

＞Verification

Verification Type	Third-party verification in conformance with ISO14025		
	☐ Internal	■ External	
	■ Third-party verification by individual verifier	☐ Third-party verification by verification body	☐ Third-party verification by system certification
Verifier	Yasuo Koseki (Koseki Environmental Office)		

＞Standards

Standards in conformance with;	■ ISO14040:2006	■ ISO14044:2006	☐ ISO14067:2018
	■ ISO14025:2006	☐ ISO21930:2007	☐ ISO21930:2017
	☐ EN15804+A2	☐ EN50693:2019	☐ ISO/IEC63366:2025

EPD owner is responsible for the information contained in the EPD and for environmental claims related to the information. For any inquiries or requests regarding the content of the EPD, please contact the EPD owner.

EPDs are comparable only if they comply with this document, use the same sub-PCR where applicable, include all relevant information and are based on equivalent scenarios. Comparability of EPDs is limited to those applying a functional unit.

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

When using weighted averages for calculation, the life cycle impact assessment results, life cycle inventory analysis-related information, waste-related information, and environmental information on output flows do not correspond to information about a specific product.

●EPD Owner's Information

Name of company and dept.	PFU Limited – Imaging Service & Support
Address	YOKOHAMA i-MARK PLACE, 4-5 Minatomirai 4-chome, Nishi-ku, Yokohama-shi, Kanagawa 220-8567 Japan
Contact	050-3786-0811
LCA practitioner	PFU Limited
Company description	PFU Ltd. was founded in 1960. Building on the expertise cultivated through computer development, we provide image document-related products and services, exemplified by our image scanners, as well as IT infrastructure construction and operational support services that contribute to our customers' peace of mind and security.

●Product Information

Product name		RICOH SP-2240N Made in Japan		
Product /model number		RICOH SP-2240N		
Product sepcification	Mass	4.27kg	Conversion factor	-
	Function	A capability to digitize original paper documents into electronic image files suitable for storage, transmission, and processing, primarily within a personal computer environment.		
	Applications	Used for document storage, sharing, and organization, as well as business digitization		
	TS*	-		
Service life	Service life	5 years		
	In-use conditions	－Scans per day: 4,000 sheets/day (15 scans/day) －Workdays per month: 20 days/month －Working days per year: 240 days/year －Expected usage period: 5 years －Total scans：18,000 times (4,800,000 sheets) / 5 years ・Printing paper is not included in the environmental impact		
	reference	Based on PCR, it was set at five years.		
Manufacturing site(s)		Thailand Factory, PTW Factory		
Product description		Product Category：Sheet-fed scanner (Without Flat-bed) For Business, for Personal use Scanning Speed ： Simplex or Duplex, 40 ppm (80 ipm) Scanning Size：215.9mm × 355.6mm Scanning Resolutions ：600dpi Scanning Method：CIS		
Website		https://www.pfu.ricoh.com/		

* TS: technical specifications,

●Product Content

Product components	Propotion (%)
Ordinary steel	19.5
SUS	2.5
Aluminium	0.0064
Other metals	0.44
Plastic	56.5
Rubber	1.1
Glass	1.3
Others	12.2
Circuit Board	6.5
Packaging materials	Propotion (%)
Plastic	3.0
Paper & Wood	97.0

●Biogenic Carbon Content

Item	Content (kg-C)	Content (kg-CO_2 eq)
Biogenic carbon content per product	-	-
Biogenic carbon content in packaging	-	-

●LCA-related Information

＞EPD Type Information

EPD type	Product type	■ Single product EPD	☐ Multiple products EPD	☐ Industry-wide EPD	
	Site type	■ Single site	☐ Multiple sites		
	Value	■ Specific	☐ Average	☐ Representative	☐ Worst case
Geographical coverage		United States			
Description of representativeness for multiple-products/sites EPD		-			
Description of variation for multiple-products/sites EPD		-			
Description of products covered in the multiple products EPD		-			

＞LCA Information

Declared unit		Per unit of product		
Mass per declared unit (Conversion factor to mass)		-		
Reference flow (number of products required to fulfil the function)		-		
System boundary		☐ Cradle-to Gate	☐ Cradle-to-Gate with options	■ Cradle-to-Grave
LCA software		MiLCA Ver.3.1.1		
LCI database		IDEA 3.1		
Characterization model		-		
Use of other background data		-		
Secondary data quality		-		
Primary data collection sites		Thailand Factory, PTW Factory		
Primary data collection period		For Thailand factory, data for the one-year period from August 2024 to July 2025 For PTW factory, data for the one-year period from January 2024 to December 2025		
Biogenic carbon		■ 0/0 approach	☐ -1/+1 approach	
Information about electricity	Use	■ Average consumption mix	☐ Others	
	Type	-		
	Purchase date	-		
	Issuing body	-		

＞Life Cycle Stages

Raw materials acquisition stage	Production stage	Distribution stage	Use stage	End of life stage
■	■	■	■	■

■ : declared stage　　– : stage not declared

＞Allocation

No processes have been subject to allocation.

＞Cut-off rules

Based on PCR, the following were excluded:
・Loads associated with the transportation process of “parts,” “materials,” “packaging materials,” and “accessories”
・Loads associated with the storage, warehouse management during transportation, sales, and installation processes of the product

＞System Boundary

The scope of the environmental impact assessment was established based on the PCR.
The temporal system boundary is 100 years.

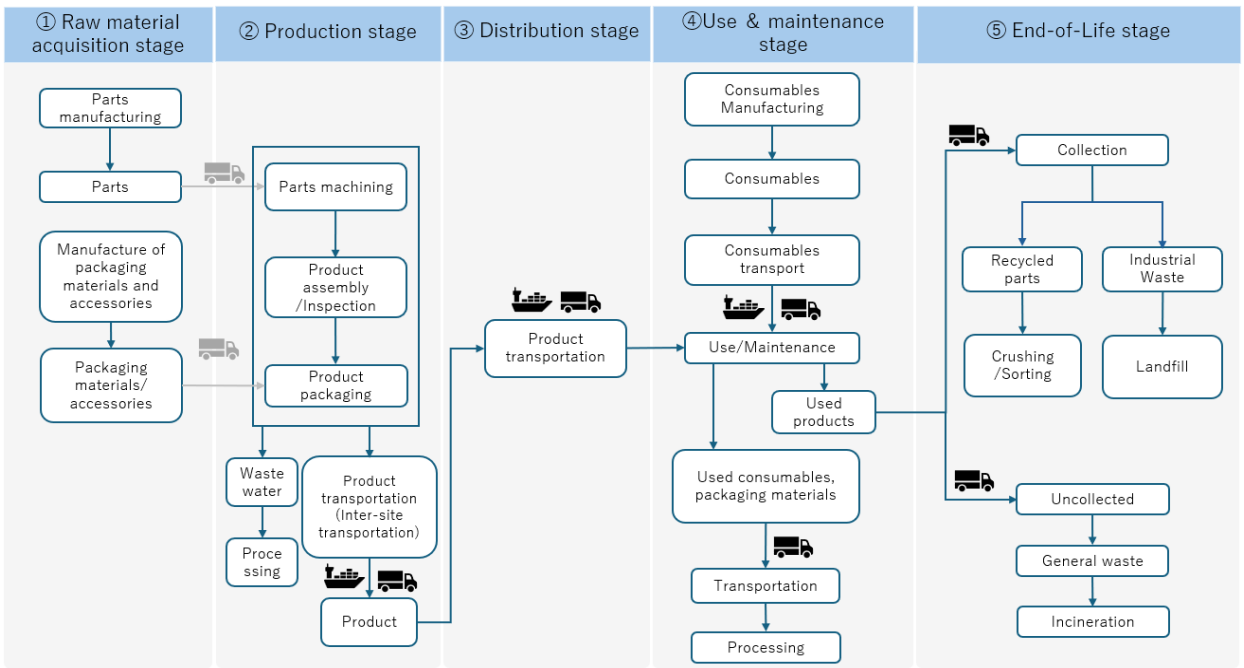
＞Scenario

For transportation where primary data collection is difficult, we applied the transportation scenario B1.
Transportation Distance from the PCR.
Furthermore, the recycling rates for paper in general, cardboard, and waste paper pulp were calculated based on Advancing Sustainable Materials Management: 2018 Tables and Figures.pdf (EPA public document).

＞Electricity Modelling

For Thailand factory, the factory's electricity consumption was calculated using actual consumption data from August 2024 to July 2025.
For PTW factory, the factory's electricity consumption was calculated using actual consumption data from January 2024 to December 2025.
*Although the periods of actual data used for the Thailand factory and the PTW factory differ, in both cases the calculation was based on the latest available data covering a continuous fixed period.

＞Life Cycle Sytem Diagram



●LCA Result

＞LCIA Indicators

		Raw materials acquisition stage	Production stage	Distribution stage	Use stage	End of life stage
GWP	kg-CO_2eq	3.51E+01	4.82E+00	6.49E+00	4.47E+01	1.85E+00
Ozone layer depletion	kg-CFC-11eq	4.51E-06	2.49E-07	8.21E-11	1.13E-06	9.10E-09
Acidification	kg-SO_2eq	3.03E-02	2.29E-02	1.45E-02	2.11E-01	1.85E-03
Resource consumption	kg-Sbeq	6.74E-03	2.31E-05	2.72E-05	1.40E-03	4.78E-06

＞LCI

		Raw materials acquisition stage	Production stage	Distribution stage	Use stage	End of life stage
Use of non-renewable resources	kg	2.35E+00	3.82E-02	6.14E-06	1.45E+00	2.21E-03
Use of renewable resources	kg	4.99E+00	2.70E-03	1.57E-06	1.51E+00	9.42E-04

＞Waste Indicators

		Raw materials acquisition stage	Production stage	Distribution stage	Use stage	End of life stage
hazardous waste disposed	kg	-	-	-	-	-
non-hazardous waste disposed	kg	2.94E-01	4.49E-04	5.32E-08	2.33E+00	3.45E+00
Municipal waste, landfill	kg	5.05E-11	8.75E-14	8.73E-17	1.34E-02	3.11E-02
Industrial waste, landfill	kg	2.94E-01	4.49E-04	5.32E-08	2.31E+00	3.42E+00

*It indicates the amount of waste generated throughout the lifecycle.

＞Output Flow Indicators

			Raw materials acquisition stage	Production stage	Distribution stage	Use stage	End of life stage
Components for reuse		kg	-	-	-	-	-
Materials for recycling		kg	-	-	-	-	-
Material for energy recovery		kg	-	-	-	-	-
Exported energy from waste (energy recovery efficiency≧60%)		MJ	-	-	-	-	-
Incineration of waste (energy recovery efficiency＜60%)	Recovered energy	MJ	-	-	-	-	-
Waste disposed in landfill and energy recoved from landfill gas	Recovered energy	MJ	-	-	-	-	-

＞Description of LCA Results

・Overview of Environmental Impact During Product Use: Actual measured power consumption serves as the factual data, calculated according to the PCR scenario.
・Overview of Transportation: For measurable transportation, actual data is used; for other aspects, calculations follow the PCR scenario.
・EPDs may be updated or discontinued if circumstances change. To verify the latest version and validity of an EPD, please check the following:
https://ecoleaf-label.jp/epd/
Since general reference values are used, the specific characteristics of this product may not be reflected. Therefore, please use this result as an approximate value.

●Additional Environmental Information

＞Additional Environmental Information not related to LCA

・This product is manufactured in an ISO 14001 certified facility.
・Complies with the International Energy Star Program.
・Complies with the European RoHS Directive.

＞Information on Hazardous Substances

Hazardous materials name	CAS No.	Standards or regulations
-	-	-
-	-	-
-	-	-

●Definitions of Terms

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●References

・ISO14025:2006 Environmental labels and declarations — Type III environmental declarations — Principles and procedures
・ISO14040:2006 Environmental management - Life Cycle Assessment - Principles and framework
・ISO14044:2006 Environmental management - Life Cycle Assessment - Requirements and guidelines