

Registration number : JR-AI-25-26040E



**EPSON**

A3 Document Scanner  
**DS-5100WN**  
(For North America)

## Functional unit

Per unit of product

## System boundary

- final products       intermediate products

Raw material acquisition, Production,  
Distribution, Use & maintenance, End-of-Life

## Main specifications of the product

Model name : DS-5100WN

Main Specifications

- Flat-bed scanner(Non ADF)
- For Business
- Scanning Speed : Simplex 4sec/page
- Scanning Size : 297.1mm × 431.8mm
- Scanning Resolution : Maximum resolution 600×600dpi
- Scanning Method CIS

\*This product is destined for North America

\* This information outlines the main details related to EPD. For more details, please refer to the website or other relevant sources.

## Company Information

Seiko Epson Corporation  
<http://www.epson.com/>  
[http://www.epson.jp/contact/\(Japanese\)](http://www.epson.jp/contact/(Japanese))  
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Registration#	JR-AI-25-26040E
PCR number	PA-590000-AI-08
PCR name	Imaging input and/or output equipment
Publication date	June 1, 2026
Verification date	May 22, 2026
Verification method	System certification
Verification#	EIR-25-004
Expiration date	May 21, 2031

## PCR review was conducted by:

Approval date	September 1, 2023
PCR review panel chair	Masayuki Kanzaki Sustainable Management Promotion Organization (SuMPO)

## Third party verifier\*

Japan Quality Assurance Organization  
Shino Nishikimi

Independent verification of data & declaration in accordance with ISO14025

internal       external

\*Auditor's name is stated if system certification has been performed.

### Results of life cycle impact assessment (LCIA)

		Raw material acquisition	Production	Distribution	Use & maintenance	End-of-Life
Global Warming Potential total (GWP-total)	kg-CO <sub>2</sub> eq	6.45E+01	6.13E+00	6.18E+00	2.87E+00	9.37E+00
Global Warming Potential fossil fuels <sup>※1</sup>	kg-CO <sub>2</sub> eq	6.43E+01	6.13E+00	6.06E+00	2.85E+00	7.87E+00
Global Warming Potential biogenic <sup>※2</sup> (GWP-biogenic)	kg-CO <sub>2</sub> eq	1.30E-01	5.03E-03	7.08E-04	1.23E-03	1.49E+00
Global Warming Potential land use and land use change <sup>※3</sup> (GWP-luluc)	kg-CO <sub>2</sub> eq	6.03E-02	1.51E-03	1.26E-01	1.07E-02	3.75E-03
Ozone layer destruction	kg-CFC-11eq	5.33E-06	9.97E-09	8.06E-08	3.95E-09	5.89E-08
Eutrophication	kg-PO <sub>4</sub> <sup>3-</sup> -eq	3.59E-03	3.48E-07	1.84E-07	2.90E-07	6.20E-06
Acidification	kg-SO <sub>2</sub> eq	7.08E-02	5.14E-02	9.26E-03	1.73E-02	1.39E-02
Photochemical ozone	kg-C <sub>2</sub> H <sub>4</sub> eq	1.26E-03	2.19E-06	2.61E-04	1.73E-06	4.37E-05
Additional optional impact indicators						
ADP elements	kg-Sbeq	6.39E-02	4.76E-07	7.03E-06	2.39E-05	4.13E-06

※1 : This indicator includes the results of "Emissions from combustion of waste from renewable source used in production processes" and "Emissions from combustion of waste from non-renewable sources used in production processes" as specified in ISO 21930:2017 under "Environmental indicators derived from LCA—ADP<sub>fossil</sub>, consumption of freshwater and additional indicators for transparency.

※2 : This indicator includes the results of "Removals and emissions associated with biogenic carbon content of the biobased product" and "Removals and emissions associated with biogenic carbon content of the biobased packaging" as specified in ISO 21930:2017 under "Environmental indicators derived from LCA—ADP<sub>fossil</sub>, consumption of freshwater and additional indicators for transparency.

※3 : This indicator includes the results of "Emissions from land use change" as specified in ISO 21930:2017 under "Environmental indicators derived from LCA—ADP<sub>fossil</sub>, consumption of freshwater and additional indicators for transparency.

### Life cycle inventory analysis (LCI)

#### Indicators describing use of primary resources

		Raw material acquisition	Production	Distribution	Use & maintenance	End-of-Life
RPR <sub>E</sub>	MJ	1.51E+02	2.29E+01	1.34E+01	3.90E+01	7.52E+00
RPR <sub>M</sub>	MJ	5.49E+00	7.80E-04	2.81E-04	4.20E-04	1.83E-03
NRPR <sub>E</sub>	MJ	9.63E+02	6.68E+01	9.34E+01	2.09E+02	4.00E+01
NRPR <sub>M</sub>	MJ	1.69E+02	6.54E-02	1.65E-02	3.20E-02	4.70E-02

RPRE = renewable primary resources used as an energy carrier (fuel)

RPRM = renewable primary resources with energy content used as material

NRPRE = non-renewable primary resources used as an energy carrier (fuel)

NRPRM = non-renewable primary resources with energy content used as material

#### Indicators describing use of secondary resources

		Raw material acquisition	Production	Distribution	Use & maintenance	End-of-Life
SM	MJ	4.36E+00	2.50E-03	1.76E-03	5.39E-03	1.25E-03
RSF	MJ	1.01E+00	5.01E-03	1.76E-04	4.67E-03	7.88E-03
NRSF	MJ	1.32E+00	0.00E+00	4.45E-04	0.00E+00	6.66E-02
RE	MJ	6.79E-01	8.54E-10	7.01E-02	5.01E-10	3.93E-02

SM = secondary material

RSF = renewable secondary fuels

NRSF = non-renewable secondary fuels

RE = recovered energy

#### ADP<sub>fossil</sub>, consumption of freshwater, and emissions and removals of CO<sub>2</sub>

		Raw material acquisition	Production	Distribution	Use & maintenance	End-of-Life
Mandatory inventory parameters						
ADP <sub>fossil</sub>	MJ	1.06E+03	7.27E+01	8.34E+01	4.09E+01	3.14E+01
Consumption of freshwater	m <sup>3</sup>	8.24E-01	3.22E-03	6.86E-04	1.16E-03	1.75E-03

Waste to disposal						
		Raw material acquisition	Production	Distribution	Use & maintenance	End-of-Life
Non-hazardous waste disposed	kg	1.87E+00	2.26E-02	8.05E-03	8.37E-03	5.84E+00
High-level radioactive waste	m <sup>3</sup>	8.53E-10	1.09E-12	8.22E-11	5.64E-10	4.60E-11
Intermediate and low-level radioactive waste	m <sup>3</sup>	3.57E-07	4.56E-10	3.44E-08	2.36E-07	1.93E-08

#### Additional explanation

- Product destination: North America
  - Calculation method (scenario) for the usage stage\*
    - Number of pages scanned per day: 64 pages/day (8 scans/day)
    - Number of operating days per month: 20 days/month
    - Number of operating days per year: 240 days
    - Expected usage period: 5 years
    - Total number of pages scanned: 76,800 pages (9,600 scans)/5 years
- \* For load calculations during the usage stage, a scenario was set up based on the above conditions that match the actual usage conditions of the user.

#### Supplementary environmental information

- Compliant with the International Energy Star Program Ver.3.2.
- It also complies with the European RoHS Directive.

#### Material composition

Material		Unit
Steel	3.606	kg
SUS	0.035	kg
Aluminium	0.000	kg
Other material	0.485	kg
Plastic	4.516	kg
Rubber	0.011	kg
Glass	1.389	kg
Paper and wood	0.002	kg
Circuit Board	0.197	kg
Other	0.513	kg

#### Assumptions of secondary data used

We used IDEA v3.4.1 and SuMPO Environmental Label Program registration intensity v1.16.

- For data quantification, please refer to PCR and Rules on quantification and declaration.
- Comparative assertion is permitted only when Rules on quantification and declaration are satisfied.  
(Reference URL : <https://ecoleaf-label.jp/regulation/>)
- This is a self-declared translation of EPD that can be accessed in the Japanese version.  
and is published for convenience purposes. Only the original EPD is valid and binding between parties.