



EcoLeaf Type III Environmental Declaration (EPD)

Registration number : JR-AI-19001E

JEMAI Environmental Labeling Program

Japan Environmental Management Association for Industry
2-1, Kaji-cho 2 chome, Chiyoda-ku, Tokyo Japan
<https://www.jemai-label.jp>



High-speed Linehead Inkjet Multifunction Printer

WorkForce Enterprise WF-M20590

Seiko Epson Corporation

Functional unit

Per unit of product

System boundary

final products intermediate products

Material - Product - Distribution - Use - Disposition

Main specifications of the product

Model name: WorkForce Enterprise WF-M20590

Main Specifications

- Multifunction device (High Performance Inkjet)
- Black and White
- Print speed: 100ppm (single-sided A4 sheets)
- Maximum paper size (standard cassette): A3+
- Automatic duplex printing

Company Information

Seiko Epson Corporation
<http://www.epson.com/>
<http://www.epson.jp/contact/> (Japanese)
3-3-5 Owa, Suwa-shi, Nagano-ken, Japan
TEL 81-266-52-5353 (Japan)

| | |
|---------------------|---------------------------------------|
| Registration# | JR-AI-19001E |
| PCR number | PA-590000-AI-01 |
| PCR name | Imaging input and/or output equipment |
| Publication date | 6/28/2019 |
| Verification date | 6/26/2019 |
| Verification method | Product-by-product |
| Verification# | JV-AI-19001 |
| Expiration date | 6/25/2024 |

PCR review was conducted by:

| | |
|------------------------|--|
| Approval date | 6/27/2018 |
| PCR review panel chair | Yuki Sakamoto (Naragakuen University) |

Third party verifier*

Kengo Minamiyama

Independent verification of data & declaration in accordance with ISO14025

internal external

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

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1. Results of life cycle impact assessment (LCIA)

| Parameter | stage | Unit | Total | Raw material acquisition | Production | Distribution | Use & maintenance | End-of-Life |
|---------------------------------|-------|-----------------------|---------|--------------------------|------------|--------------|-------------------|-------------|
| Global warming IPCC2013 GWP100a | | kg-CO ₂ eq | 1.7E+03 | 9.8E+02 | 2.1E+01 | 2.4E+02 | 3.1E+02 | 1.4E+02 |
| Acidification | | kg-SO ₂ eq | 1.9E+00 | 8.8E-01 | 3.4E-03 | 5.0E-01 | 2.9E-01 | 2.3E-01 |
| Resources consumption | | kg-Sbeq | 1.8E-01 | 1.2E-01 | 6.0E-05 | 1.0E-03 | 5.7E-02 | 2.8E-04 |

| Parameter | Raw material acquisition | Production | Distribution | Use & maintenance | End-of-Life |
|---------------------------------|--------------------------|------------|--------------|-------------------|-------------|
| Global warming IPCC2013 GWP100a | 58% | 1% | 14% | 19% | 8% |
| Acidification | 46% | 0% | 26% | 15% | 12% |
| Resources consumption | 68% | 0% | 1% | 31% | 0% |

2. Life cycle inventory analysis (LCI)

| Parameter | Unit | Value |
|----------------------------------|------|---------|
| Non-renewable material resources | kg | 5.6E+01 |
| Renewable material resources | kg | 2.9E+02 |

3. Material composition

| Material | Unit | Value |
|----------------|------|---------|
| Steel | kg | 1.1E+02 |
| SUS | kg | 3.8E+00 |
| Aluminum | kg | 3.3E+00 |
| Other metal | kg | 2.4E+00 |
| Plastic | kg | 5.5E+01 |
| Rubber | kg | 1.7E+00 |
| Glass | kg | 1.7E+00 |
| Paper and wood | kg | 2.4E+01 |
| Circuit board | kg | 3.1E+00 |
| Others | kg | 8.8E+00 |

5. Additional explanation

- Product destination: North America
- Calculation method of use stage (scenario)
 - Expected usage period: five years
 - Estimated number of use: 1,497,600 sheets*
 - Print measuring method (pattern): ISO/IEC 19752
 - Inventory of the print paper is not included
- Products selected in the scenario used for inventory calculation
 - Multifunction device (High Performance IJ)

* In accordance with the ENERGY STAR® Ver.3.0 (to be revised in October 2019), the number of print per week of Ve.2.0 specified in PCR is calculated as 1/4.

1,497,600 sheets = (156 pages x 32 jobs/day x 5 days) / 4 x 4 weeks x 12 months x 5 years

6-1. Supplementary environmental information

- This product and main components are produced in our ISO 14001 certified factories.
- ENERGY STAR® qualified. Next Ver.3.0 standards are also satisfied.
- EU RoHS compliant.

7. Assumptions of secondary data used

Inventory Database: IDEA Ver.2.1.3

8. Remarks

- 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 : <http://www.jemai-label.jp/regulation/>)