



EcoLeaf

Type III Environmental Declaration (EPD)

Registration number : JR-AI-22029E

Japan EPD Program by SuMPO

Sustainable Management Promotion Organization

2-1, Kaji-cho 2 chome, Chiyoda-ku, Tokyo Japan

<https://ecoleaf-label.jp/>

**brother**  
at your side

BROTHER INDUSTRIES, LTD.

Business Color Laser Printer with Duplex Printing and  
Wireless Networking

**HL-EX470W**



**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: HL-EX470W

- Printer (EP method)
- Color
- Product weight: 29.7kg    Packaging etc.: 4.3kg
- Printing Speed: 40ppm (A4)
- Automatic duplex printing
- wired/wireless LAN

\* This product is for North America.

**Company Information**

Brother Industries, Ltd.  
TEL: 81-52-824-2511 (Representative)  
FAX: 81-52-824-5177  
<https://www.brother-usa.com/>

<b>Registration#</b>	JR-AI-22029E
<b>PCR number</b>	PA-590000-AI-04
<b>PCR name</b>	Imaging input and/or output equipment
<b>Publication date</b>	12/12/2022
<b>Verification date</b>	5/30/2022
<b>Verification method</b>	System certificaion
<b>Verification#</b>	JV-AI-22029E
<b>Expiration date</b>	5/29/2027
<b>PCR review was conducted by:</b>	
<b>Approval date</b>	4/1/2022
PCR review panel chair	Masayuki Kanzaki Sustainable Management Promotion Organization

**Third party verifier\***

Wataru Kawamura

Independent verification of data & declaration in  
accordance with ISO14025

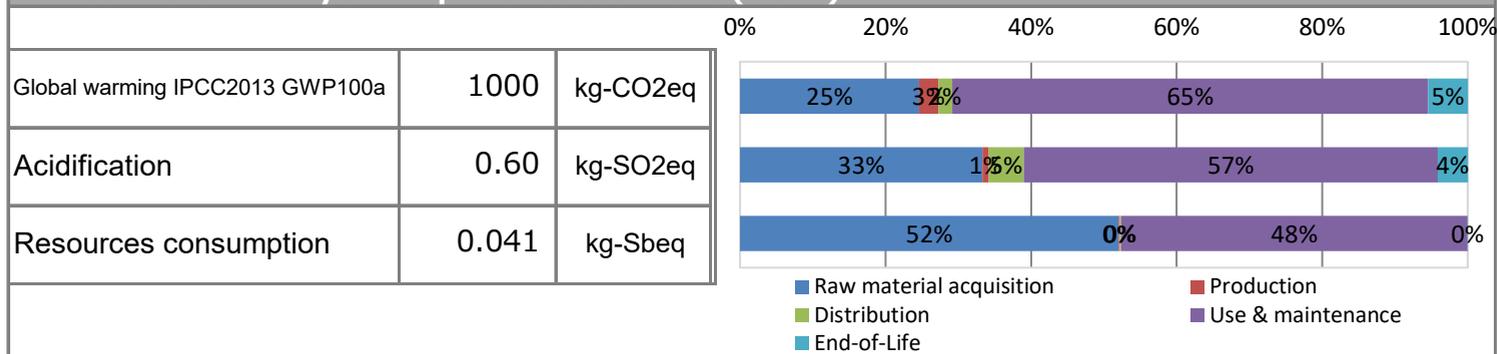
internal       external

\*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 <sub>2</sub> eq	1.0E+03	2.5E+02	2.6E+01	1.9E+01	6.6E+02	5.4E+01
Acidification		kg-SO <sub>2</sub> eq	6.0E-01	2.0E-01	5.3E-03	2.9E-02	3.4E-01	2.5E-02
Resources consumption		kg-Sbeq	4.1E-02	2.2E-02	5.9E-05	8.1E-05	2.0E-02	1.4E-05

**2. Life cycle inventory analysis (LCI)**

項目	値	単位
Non-renewable material resources	3.8E+01	kg
Non-renewable energy resources	3.6E+02	kg
Renewable material resources	1.3E+02	kg
Renewable primary energy	3.2E+02	MJ
Consumption of freshwater	9.7E-01	m <sup>3</sup>

**3. Material composition**

Material	値	Unit
Steel	9.0E+00	kg
SUS	2.8E-01	kg
Aluminium	4.1E-01	kg
Other metal	1.0E-01	kg
Plastic	1.7E+01	kg
Rubber	2.5E-01	kg
Glass	2.7E-01	kg
Paper and Wood	3.5E+00	kg
Circuit board	1.2E+00	kg
Othres	1.9E+00	kg

**5. Additional explanation**

Calculation method for usage stage (scenario) : Printer (EP), Expected use period: 5 years, Assumed usage: 240,000 sheets, Print measuring method (pattern): ISO/IEC 19798, Printing paper is not included in the environmental impact, The applied Energy Star program version is 3.0, This product is for North America.

**6-1. Supplementary environmental information**

This product and main components are produced in our ISO 14001 certified factories.

**7. Assumptions of secondary data used**

Inventory Database: IDEA v2.1.3, and registered data of Japan EPD Program by SuMPO, JLCA data v1.10 are used.

**8. Remarks**

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- 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/>)