



EcoLeaf

Type III Environmental Declaration (EPD)

Registration number : JR-AI-21108E

Ecoleaf Environmental Labeling Program

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.

Compact Color Inkjet All-in-One  
**MFC-J1170DW**



### Functional unit

Per unit of product

### System boundary

- final products
- intermediate products

Material - Production - Distribution - Use - End-of-Life

### Main specifications of the product

Model name: MFC-J1170DW

- Personal Facsimile (Color IJ method)
- Product weight: 7.7kg Packaging etc.: 1.0kg
- Maximum paper size (maximum 215.9 x 297 mm)
- G3 compatible
- Automatic duplex printing
- Wireless / wired 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/>

Registration#	JR-AI-21108E
PCR number	PA-590000-AI-03
PCR name	Imaging input and/or output equipment
Publication date	11/5/2021
Verification date	10/20/2021
Verification method	System certificaion
Verification#	JV-AI-21108
Expiration date	10/19/2026
<b>PCR review was conducted by:</b>	
Approval date	11/8/2019
PCR review panel chair	Masayuki Kanzaki Sustainable Management Promotion Organization

### Third party verifier\*

Wataru Kawamura

Independent verification of data & declaration in accordance with ISO14025

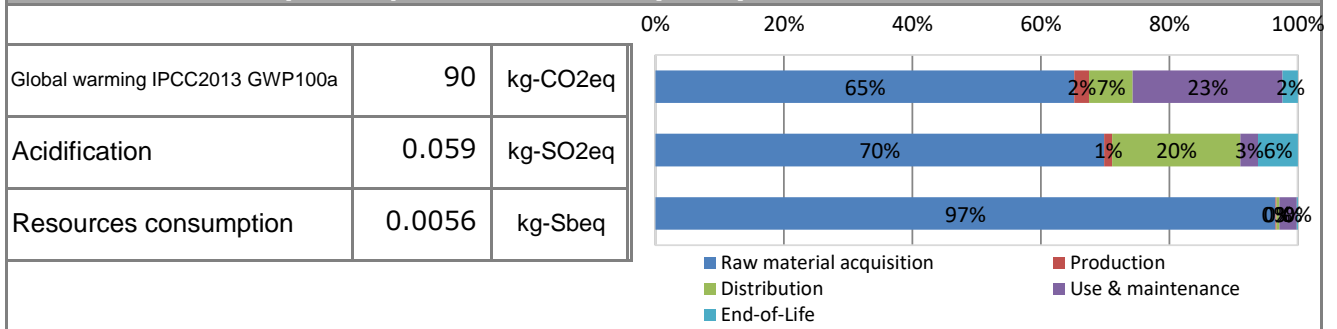
internal  external

\*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	9.0E+01	5.9E+01	2.1E+00	6.1E+00	2.1E+01	2.1E+00
Acidification		kg-SO <sub>2</sub> eq	5.9E-02	4.1E-02	7.5E-04	1.2E-02	1.6E-03	3.6E-03
Resources consumption		kg-Sbeq	5.6E-03	5.4E-03	8.8E-06	2.6E-05	1.5E-04	8.9E-06

2. Life cycle inventory analysis (LCI)

項目	Value	単位
Non-renewable material resources	5.6E+00	kg
Non-renewable energy resources	3.7E+01	kg
Renewable material resources	9.6E+00	kg
Renewable primary energy	3.7E+01	MJ
Consumption of freshwater	8.2E-02	m <sup>3</sup>

3. Material composition

Material	Value	Unit
Steel	1.7E+00	kg
SUS	3.2E-02	kg
Aluminium	7.2E-03	kg
Other metal	2.2E-03	kg
Plastic	4.4E+00	kg
Rubber	1.7E-01	kg
Glass	6.2E-01	kg
Paper and Wood	9.2E-01	kg
Circuit board	3.0E-01	kg
Othres	6.3E-01	kg



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## 5. Additional explanation

Calculation method for usage stage (scenario):

Facsimile (personal model), Expected use period: 5 years, Transmission / reception: 900 each, Use pattern when measuring power: ITUT No.1 chart, Printing paper is not included in the environmental impact, 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 EcoLeaf Environmental Labeling Program, JLCA data v1.10 are used.

Used in this product Basic unit list Described in the attached table.

## 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/>)

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## 7. Assumptions of secondary data used

Inventory Database: IDEA v2.1.3, and registered data of EcoLeaf Environmental Labeling Program, JLCA data v1.10 are used.

([https://ecoleaf-label.jp/entry/application\\_form.html#FB-01](https://ecoleaf-label.jp/entry/application_form.html#FB-01))

Base Unit Code Number	Base Unit Name	Unit
119300000	felt and bonded fabrics, 4 digit	kg
151100000	pulp , 4 digit	kg
151119101	waste paper pulp, for container	kg
152112000	non-painted printing paper	kg
152113000	painted printing paper	kg
152114000	special printing paper	kg
155311000	corrugated board box	kg
173516000	polyethylene	kg
173516102	low density polyethylene	kg
173517103	polystyrene, shock resistance	kg
173517105	expanded polystyrene (EPS)	kg
173517106	acrylonitrile butadiene styrene resin	kg
173518000	polypropylene	kg
173522000	methacrylic resin	kg
173524000	polyamide resin	kg
173526000	polyethylene terephthalate	kg
173531000	polyacetal	kg
173539105	polyimide	kg
173539106	polybutylene terephthalate	kg
173539113	denatured polyphenylene oxide	kg
173539201	silicone rubber, compound	kg
173600000	synthetic rubbers (including synthetic latex), 4 digit	kg
173611102	ethylene propylene diene terpolymer	kg
173611103	chloroprene rubber, butadiene	kg
175500000	printing ink, 4 digit	kg
179412000	cellulose adhesives and plastic adhesives	kg
181111801	energy, gasoline combustion	L
181115801	energy, light oil combustion	L
181124801	energy, liquefied petroleum gas (LPG) combustion	kg
192100000	plastic film , 4 digit	kg
192112000	miscellaneous flexible plastic film, less than 0.2mm thickness	kg
192511100	packaging material, HDPE bag	kg
192511101	packaging material, LDPE	kg
192591700	plastic molding processing service, inflation film, standard bag	kg
194100000	foamed plastic products (flexible and semi-rigid), 4 digit	kg
194111101	polyurethane, foamed	kg
194200000	foamed plastic products, rigid , 4 digit	kg
221212000	reinforced glass	m2



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224419202	silicon nitride ceramics	kg
230000707	forging service, iron and steel	kg
230000708	casting and forged steel processing service	kg
232113000	ordinary steel wire rods	kg
232116000	ordinary steel cold rolled steel sheet and strips	kg
232121000	tin plates	kg
232123201	electrogalvanized steel sheet	kg
233113000	special steel wire rods	kg
233122000	carbon steel for machine structural uses	kg
233125000	free cutting steel	kg
234100000	stainless steels and heat resisting steels, 4 digit	kg
234112000	stainless steel bars	kg
234113000	stainless steel wire rods	kg
243111000	rolled and drawn copper products	kg
243211206	aluminium sheet for general use	kg
243916000	rolled nickel and nickel alloy materials	kg
244100000	electric wire and cable, except optical fiber cable , 4 digit, as Conductor	kg
254392700	machine press processing service	kg
259213000	wire springs	kg
291911200	isotropic barium ferrite magnet, dry process	kg
331111014	electricity, Japan, 2014	kWh
332103011	electricity, Philippines, IEA, 2011	kWh
332134011	electricity, United States, IEA, 2011	kWh
341111801	energy, town gas 13A combustion	Nm3
361100000	tap water, 4 digit	m3
421211000	rail transportation service, freight	tkm
441111204	truck transportation service, 2t truck, loading ratio average	tkm
441111304	truck transportation service, 4t truck, loading ratio average	tkm
441111401	truck transportation service, 10t truck, loading ratio 100%	tkm
441111404	truck transportation service, 10t truck, loading ratio average	tkm
451200107	ship transportation service, container ship <4kTEU	tkm
462100000	air transportation service, cargo, 4 digit	tkm
512100201	high degree of intermediate treatment service of used OA equipment (decomposition ~ crush and separation)	kg
851612201	incineration service service, domestic waste, waste plastics	kg
851612205	incineration service, domestic waste, waste paper	kg
851800000	sewerage treatment service, 4 digit	m3
852200206	industrial waste treatment service, waste plastics	kg
852200207	industrial waste treatment service, waste paper	kg
852200212	industrial waste treatment service, waste metal	kg
JPR-0010	assembled circuit board	kg
JPR-0013	injection molding	kg
JPR-0015	medium motor	kg
JPR-0019	glass molding	kg