



EcoLeaf

Type III Environmental Declaration (EPD)

Registration number : JR-AI-23286E

Japan EPD Program by SuMPO

Sustainable Management Promotion Organization  
14-8, Uchikanda 1-chome, Chiyoda-ku, Tokyo Japan  
<https://ecoleaf-label.jp/>



**SHARP**

Sharp Corporation

DIGITAL FULL COLOR MULTIFUNCTIONAL SYSTEM

**BP-90C80 (US)**

MULTI BYPASS TRAY and EXIT TRAY CABINET are optional,  
their impact is not included.

**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 : BP-90C80  
Marking technologies : Electrophotographic Printer (EP)  
Print speed : Monochrome 80prints/minute (A4)  
Full-color 80prints/minute (A4)

Maximum Paper Size : A3W  
Duplex copying : Standard

**Company Information**

SHARP CORPORATION  
Smart Business Solutions BU  
E-mail : ECOLEAF-BS@sharp.co.jp

Registration#	JR-AI-23286E
PCR number	PA-590000-AI-07
PCR name	Imaging input and/or output equipment
Publication date	9/28/2023
Verification date	9/19/2023
Verification method	Product-by-product
Verification#	JV-AI-23286
Expiration date	9/18/2028
<b>PCR review was conducted by:</b>	
Approval date	4/24/2023
PCR review panel chair	Masayuki Kanzaki Sustainable Management Promotion Organization

**Third party verifier\***

Hiroyuki Nakamura

Independent verification of data & declaration in  
accordance with ISO14025

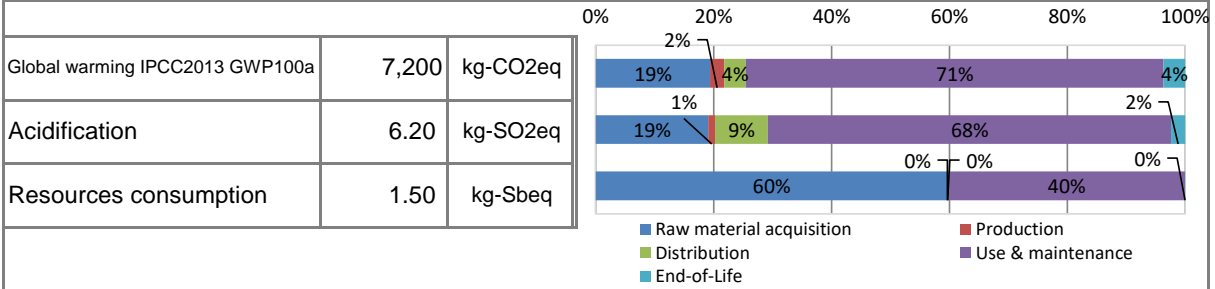
internal       external

\*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	7.2E+03	1.4E+03	1.7E+02	2.6E+02	5.1E+03	2.7E+02
Acidification		kg-SO <sub>2</sub> eq	6.2E+00	1.2E+00	7.1E-02	5.5E-01	4.2E+00	1.5E-01
Resources consumption		kg-Sbeq	1.5E+00	9.0E-01	5.2E-04	1.1E-03	6.1E-01	2.9E-04

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

Parameter	Unit	Unit
Non-renewable material resources	3.6E+02	kg
Renewable material resources	5.1E+02	kg

**3. Material composition**

Material	Unit	Unit
Steel	1.4E+02	kg
SUS	5.2E+00	kg
Aluminium	2.9E+00	kg
Other metal	2.0E+00	kg
Plastic	5.2E+01	kg
Rubber	2.7E-01	kg
Glass	2.8E+00	kg
Paper · Wood	2.7E+01	kg
Circuit Board	5.1E+00	kg
Others	1.6E+01	kg

**5. Additional explanation**

- Product destination: North America
  - Calculation method of use stage (scenario)
    - Expected usage period: five years
    - Estimated number of use : 3,840,000 sheets  
 $32 \text{ (Jobs/Day)} \times 100 \text{ (Sheets/Job)} \times 5 \text{ (Days/Week)} \times 4 \text{ (Weeks/Month)} \times 12 \text{ (Months/Year)} \times 5 \text{ (Years)}$   
 $= 3,840,000 \text{ sheets}$
  - The impact of paper for printing is not included.
  - Products selected in the scenario used for inventory calculation : Multifunction device (EP)
- ※ Calculated according to the ENERGY STAR® Ver2.0 program.



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#### 6-1. Supplementary environmental information

- Conforms to ENERGY STAR® Program Ver.3.2.(Professional)
- Compliant with European RoHS regulations.
- Assembly and production of this product, as well as production of the photoconductor and toner, which are the main components, are performed at ISO 14001-certified factories.

#### 7. Assumptions of secondary data used

IDEA v2.1.3 and Japan EPD Program by SuMPO Registry data v1.13

#### 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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## Appendix

The following is a list of the intensity basic units used to calculate the LCA for this product. These intensity basic units can be obtained from the following URL.  
[https://ecoleaf-label.jp/entry/application\\_form.html#FB-01](https://ecoleaf-label.jp/entry/application_form.html#FB-01)

### Raw material acquisition

- felt and bonded fabrics
- cork goods
- paper and machine-made Japanese paper, 4 digit
- titanium oxide
- silica gel
- cyclic intermediates, synthetic dyes and organic pigments, 4 digit
- melamine resin
- polyethylene, high density (HDPE)
- low density polyethylene
- polystyrene
- acrylonitrile butadiene styrene resin
- acrylonitrile butadiene styrene resin, flame retardancy
- polypropylene
- methacrylic resin
- polyamide resin
- fluorocarbon resin
- polyethylene terephthalate
- epoxy resin
- polyacetal
- polycarbonate
- miscellaneous plastic
- polyimide
- polybutylene terephthalate
- polyphenylene ether resin
- polyphenylene sulfide
- silicone rubber, compound
- synthetic rubbers (including synthetic latex), 4 digit
- ethylene propylene diene terpolymer
- chloroprene rubber, butadiene
- organic chemistry industrial products which are not elsewhere classified, 4 digit
- acrylic long and short fibers
- packaging material, HDPE bag
- foamed plastic products (flexible and semi-rigid), 4 digit
- polyurethane, flexible
- polyurethane, foamed
- rigid polyurethane, foamed
- miscellaneous rubber belts
- ordinary steel, final, 4 digit
- ordinary steel cold rolled steel sheet and strips
- electrogalvanized steel sheet
- special steel pipes and tubes
- carbon steel for machine structural uses
- spring steel and bearing steel
- free cutting steel
- special steel wires
- stainless steels and heat resisting steels, 4 digit
- rolled and drawn copper products
- rolled aluminium products
- aluminium sheet for general use
- extruded aluminium products, include drawing products
- aluminium pipe
- aluminium foil
- electric wire and cable, except optical fiber cable , 4 digit
- aluminium and aluminium alloy die castings, 4 digit
- non-ferrous die castings, except aluminium and aluminium alloy die castings, 4 digit
- powder metallurgy products, 4 digit
- bolts and nuts
- wood screws, machine screws and set screws
- helical springs

photoelectric converter device  
isotropic barium ferrite magnet, dry process  
anisotropic barium ferrite magnet, wet process  
plate glass, 4 digit  
assembled circuit board  
medium motor  
machine press processing  
injection molding  
glass molding  
expanded polystyrene (EPS)  
boards less than 7.5cm depth of minimum cross section, with more than 4 times width larger than depth  
corrugated board box  
black pigment, for coloring recycled pallet  
glass bulbs for electric lamps (including tubes and bars)  
electric nickel, MCLE process  
miscellaneous primary batteries  
isopropylalcohol  
tetrahydrofuran  
polydimethylsiloxane  
methanol

#### Production

electricity, Japan, 2014FY  
energy, LNG combustion  
tap water  
sewerage treatment service  
electricity, PR of China, IEA, 2011  
energy, light oil combustion  
electricity, Thailand, IEA, 2011  
truck transportation, 2t truck, loading ratio default  
ship transportation, container ship <4kTEU

#### Distribution

truck transportation, 10t truck, loading ratio default  
ship transportation, container ship <4kTEU

## Use & maintenance

corrugated board box  
polypropylene  
polyethylene terephthalate  
polyethylene, high density (HDPE)  
chloroprene rubber, butadiene  
acrylonitrile butadiene styrene resin, flame retardancy  
polyurethane, foamed  
polyacetal  
paper and machine-made Japanese paper, 4 digit  
packaging material, HDPE bag  
polycarbonate  
stainless steels and heat resisting steels, 4 digit  
aluminium pipe  
free cutting steel  
electrogalvanized steel sheet  
miscellaneous plastic  
wood screws, machine screws and set screws  
helical springs  
spring steel and bearing steel  
special steel wires  
felt and bonded fabrics  
foamed plastic products (flexible and semi-rigid), 4 digit  
polyimide  
paperboard , 4 digit  
painted printing paper  
rolled aluminium products  
synthetic rubbers (including synthetic latex), 4 digit  
polyphenylene ether resin  
rigid polyurethane, foamed  
machine press processing  
injection molding  
electric wire and cable, except optical fiber cable , 4 digit  
bolts and nuts  
electric nickel, MCLC process  
polyphenylene sulfide  
carbon steel for machine structural uses  
cyclic intermediates, synthetic dyes and organic pigments, 4 digit  
organic chemistry industrial products which are not elsewhere classified, 4 digit  
titanium oxide  
polyamide resin  
isopropylalcohol  
methanol  
tetrahydrofuran  
polydimethylsiloxane  
powder metallurgy products, 4 digit  
black pigment, for coloring recycled pallet  
silica gel  
boards less than 7.5cm depth of minimum cross section, with more than 4 times width larger than depth  
assembled circuit board  
polystyrene  
silicone rubber, compound  
aluminium foil  
electricity, Japan, 2014FY  
energy, LNG combustion  
tap water  
sewerage treatment service  
electricity, PR of China, IEA, 2011  
energy, light oil combustion  
electricity, Thailand, IEA, 2011  
truck transportation, 2t truck, loading ratio default  
ship transportation, container ship <4kTEU  
truck transportation, 10t truck, loading ratio default  
electricity, United States, IEA, 2011  
high degree of intermediate treatment of used OA equipment (decomposition and dissection ~ crush and separation)  
landfill, industrial wastes

incineration, industrial waste  
landfill, domestic waste  
incineration, domestic waste, waste plastics  
incineration, domestic waste, waste paper

#### End-of-Life

truck transportation, 2t truck, loading ratio default  
high degree of intermediate treatment of used OA equipment (decomposition and dissection ~ crush and separation)  
landfill, industrial wastes  
incineration, industrial waste  
landfill, domestic waste  
incineration, domestic waste, waste plastics  
incineration, domestic waste, waste paper