EcoLeaf
Type III Environmental Declaration (EPD)
Registration number： JR-BW-24001E-A

Japan EPD Program by SuMPO
Sustainable Management Promotion Organization
14-8, Uchikanda 1-chome, Chiyoda-ku, Tokyo Japan
https://ecoleaf-label.jp/

AGC Inc.

Mirror and Painted Glass

Functional unit

1 m^2

System boundary

☐ final products ■intermediate products

Raw material Acquisition-Distribution-Production

Main specifications of the product

Products ; Mirror and Painted Glass

Main application ; Architectural and Mobility use

Brand name ;

Mirox MNGE, Decomirror, MirroTAG, Lacobel

Production sites ; Samut Prakan Factory (Thailand)

Cikampek Factory (Indonesia)

Specifications ;

Thickness of glass ; 2,3,4,5,6mm

Weight ; 12kg (glass thickness 4.8mm weighted average)

Processing method ;

Glass ; Float glass method

Mirror ; Silvering method

Company Information

AGC Glass Asia Pacific

https://agc-glassasia.com/contact-us/

Registration#	JR-BW-24001E-A
PCR number	PA-171190-BW-02
PCR name	Processed glass
Publication date	4-Sep-2024
Verification date	29-Aug-2024
Verification method	Product-by-product
Verification#	JV-BW-24001
Expiration date	28-Aug-2029

PCR review was conducted by:

Approval date	1-Sep-2023
PCR review panel chair	Ken Yamagishi (Sustainable Management Promotion Organization)

Third party verifier*

Takahiro Atoh

Independent verification of data & declaration in accordance with ISO14025 and ISO21930

☐internal ■external

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

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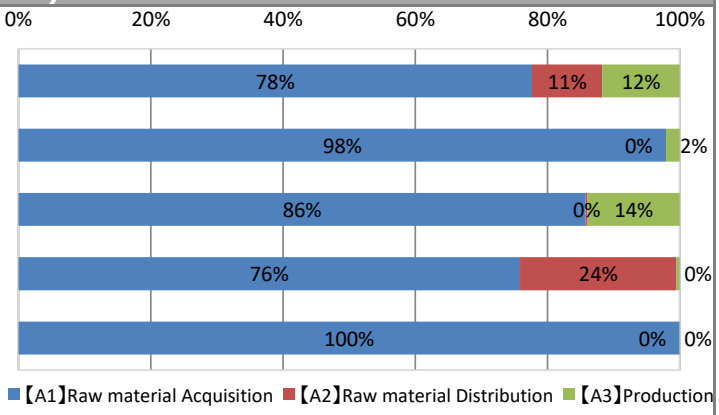
1. Results of life cycle impact assessment (LCIA)

Global warming IPCC2013 GWP100a	17	kg-CO_2eq
Ozone layer destruction	7.2.E-04	g-CFC-11eq
Acidification	96	g-SO_2eq
Photochemical ozone	0.67	g-C_2H_4eq
Eutrophication	1.7	g-PO_4^{3-}eq



Parameter \ stage	Unit	Total	【A1】Raw material Acquisition	【A2】Raw material Distribution	【A3】Production
Global warming IPCC2013 GWP100a	kg-CO_2eq	1.7E+01	1.3E+01	1.8E+00	1.9E+00
Ozone layer destruction	kg-CFC-11eq	7.2E-07	7.0E-07	2.4E-11	1.5E-08
Acidification	kg-SO_2eq	9.6E-02	8.2E-02	3.0E-04	1.3E-02
Photochemical ozone	kg-C_2H_4eq	6.7E-04	5.1E-04	1.6E-04	3.2E-06
Eutrophication	kg-PO_4^{3-}eq	1.7E-03	1.7E-03	1.8E-11	4.2E-07

2. Life cycle inventory analysis (LCI)

Specifications		Unit
Non-renewable material resources	1.1E+01	kg
Non-renewable energy resources	2.6E+02	MJ
Processing method ;	3.8E+00	kg
Renewable primary energy	1.2E+01	MJ
Consumption of freshwater	3.5E+00	m^3

3. Material composition

Material		Unit
Silica sand	52	%
Soda ash	9	%
Dolomite	10	%
Cullet	25	%
Others	4.4	%

4. Waste to disposal

Parameter		Unit
Hazardous waste	0.0E+00	kg
Non-hazardous waste	2.3E-02	kg

*Data derived from LCA and not assigned to the impact categories of LCIA

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5. Additional explanation

This calculation consists of Float glass process and Mirrorring process. Float glass process is the result of calculation using the weighted average value (4.8 mm) of the Float glass thickness (2, 3, 4, 5, 6 mm). Similarly, the Mirrorring process is calculated by averaging the mirror type and paint.

6-1. Supplementary environmental information

The Products are manufactured in ISO14001 certified factories.

6-2. Regulated hazardous substances

Substance	CAS No.	Reference to standards or regulations
Sulfur dioxide	7446-09-5	Industrial Safety and Health Act
Cobalt monoxide	1307-96-6	Industrial Safety and Health Act
Nickel monoxide	1313-99-1	Industrial Safety and Health Act

7. Assumptions of secondary data used

We used the IDEA v3.1.0 data

8. Remarks

revised 2025/1/17 (JR-BW-24001E-A):revised organization, contact site

- 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/)