



EcoLeaf

Type III Environmental Declaration (EPD)

Registration number : JR-BW-24001E

Japan EPD Program by SuMPO

Sustainable Management Promotion Organization

14-8, Uchikanda 1-chome, Chiyoda-ku, Tokyo Japan

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

Architectural Glass Asia Pacific Company, AGC Inc.

Mirror and Painted Glass



Functional unit

1 m<sup>2</sup>

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 Sales & General Enquiries
https://agc-glassasia.com/

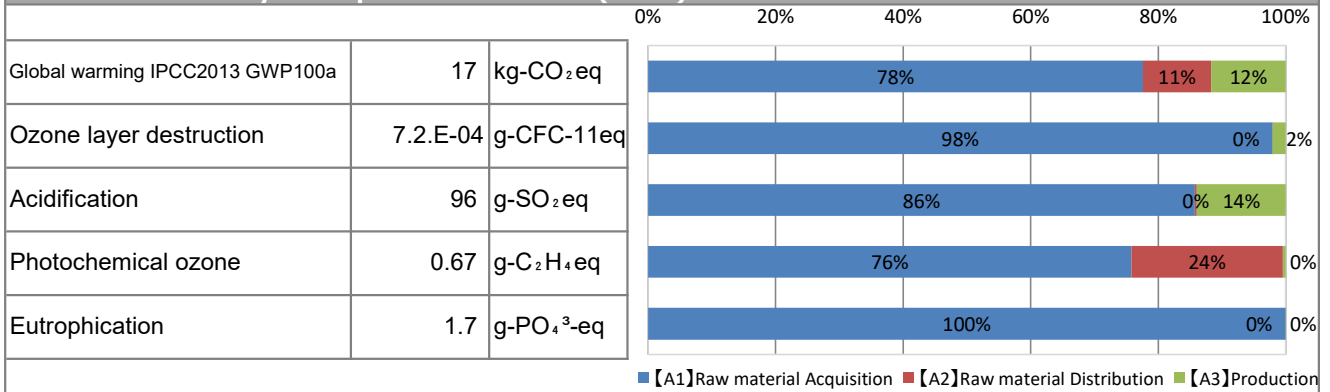
Table with registration details: Registration#, PCR number, PCR name, Publication date, Verification date, Verification method, Verification#, Expiration date, PCR review was conducted by: Approval date, PCR review panel chair.

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.



1. Results of life cycle impact assessment (LCIA)



Parameter	stage	Unit	Total	【A1】 Raw material Acquisition	【A2】 Raw material Distribution	【A3】 Production
Global warming IPCC2013 GWP100a		kg-CO <sub>2</sub> eq	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 <sub>2</sub> eq	9.6E-02	8.2E-02	3.0E-04	1.3E-02
Photochemical ozone		kg-C <sub>2</sub> H <sub>4</sub> eq	6.7E-04	5.1E-04	1.6E-04	3.2E-06
Eutrophication		kg-PO <sub>4</sub> <sup>3-</sup> eq	1.7E-03	1.7E-03	1.8E-11	4.2E-07

2. Life cycle inventory analysis (LCI)

Specifications	Unit	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 <sup>3</sup>

3. Material composition

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

4. Waste to disposal

Parameter	Unit	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



## 5. Additional explanation

This calculation consists of Float glass process and Mirroring 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 Mirroring 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

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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/>)