



EcoLeaf

Type III Environmental Declaration (EPD)

Registration number : JR-BS-22001E-B

Japan EPD Program by SuMPO

Sustainable Management Promotion Organization

14-81, Uchikanda 1 chome, Chiyoda-ku, Tokyo Japan

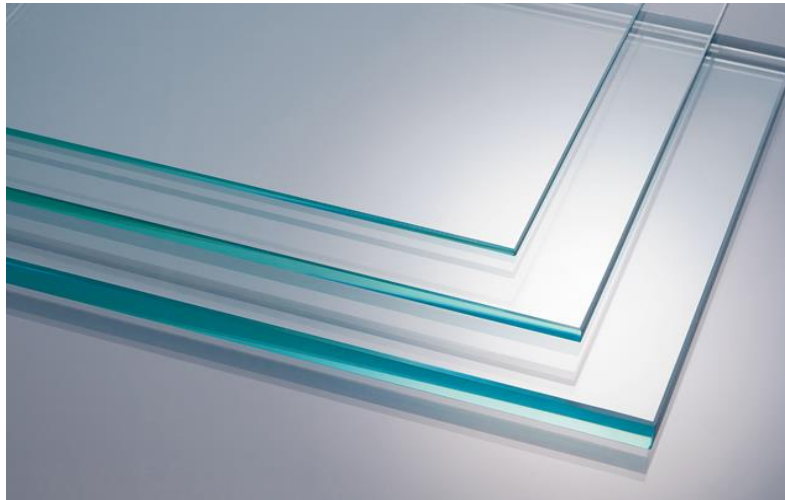
<https://ecoleaf-label.jp/>



Your Dreams, Our Challenge

AGC Inc.

Flat Glass



### Functional unit

1ton

### System boundary

final products       intermediate products

Raw material acquisition-Distribution-Production

### Main specifications of the product

#### Products ;

Clear glass, Tinted glass

#### Production sites ;

Cikampek Factory, Sidoarjo Factory (Indonesia)

Samut Prakan Factory, Chon Buri Factory (Thailand)

#### Specifications

Thickness ; t=2~12mm

Area ; 33.3~200m<sup>2</sup>

### Company Information

AGC Glass Asia Pacific

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

Registration#	JR-BS-22001E-B
PCR number	PA-171100-BS-01
PCR name	Flat glass
Publication date	27-Sep-2022
Verification date	20-Sep-2022
Verification method	Product-by-product
Verification#	JV-BS-22001
Expiration date	19-Sep-2027

### PCR review was conducted by:

Approval date	19-Aug-2022
PCR review panel chair	Ken Yamagishi Sustainable Management Promotion Organization

### Third party verifier\*

Yuki Sakamoto

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

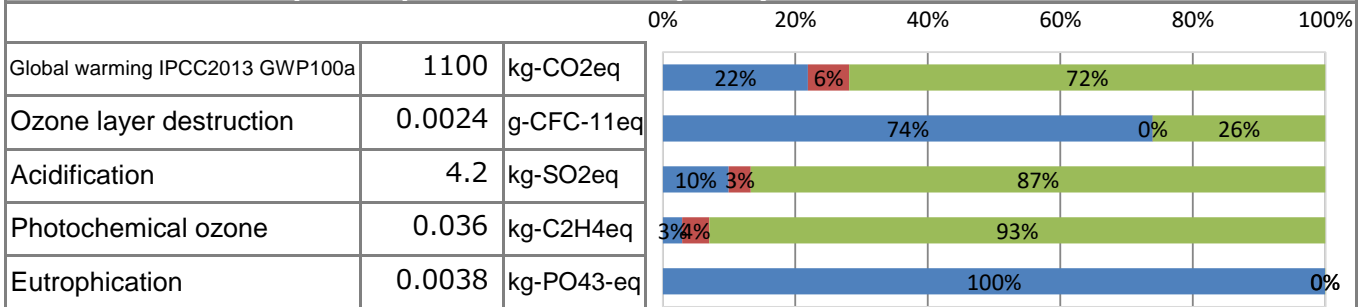
internal       external

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

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**1. Results of life cycle impact assessment (LCIA)**



Parameter	stage	Unit	Total	Raw material acquisition	Distribution	Production
Global warming IPCC2013 GWP100a		kg-CO <sub>2</sub> eq	1.1E+03	2.3E+02	6.7E+01	7.7E+02
Ozone layer destruction		g-CFC-11eq	2.4E-03	1.7E-03	4.8E-07	6.1E-04
Acidification		kg-SO <sub>2</sub> eq	4.2E+00	4.2E-01	1.4E-01	3.7E+00
Photochemical ozone		kg-C <sub>2</sub> H <sub>4</sub> eq	3.6E-02	1.0E-03	1.5E-03	3.4E-02
Eutrophication		kg-PO <sub>43</sub> -eq	3.8E-03	3.8E-03	4.4E-13	4.6E-07

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

Parameter	Unit
Non-renewable material resources	1.2E+03 kg
Non-renewable energy resources	1.5E+04 MJ
Renewable material resources	2.4E+02 kg
Renewable primary energy	3.5E+02 MJ
AGC Glass Asia Pacific	2.6E+00 m <sup>3</sup>

**3. Material composition**

Material	Unit
Silica sand	45.3 %
Soda ash	13.7 %
Dolomite	13.7 %
Cullet	23.2 %
Others	4.2 %

**4. Waste to disposal**

Parameter	Unit
Hazardous waste	0.00E+00 kg
Non-hazardous waste.	3.2E+00 kg

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

**5. Additional explanation**

These data are an average of clear and tinted glass, and do not represent data for individual products. The products do not include pyrolytic(on-line CVD) coated glass.

**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



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## 7. Assumptions of secondary data used

We used the IDEA v2.1.3 data

## 8. Remarks

revised 2025/1/17 (JR-BS-22001E-B):revised organization, contact site

revised 2023/2/24 (JR-BS-22001E-A):revised organization, contact site , added ISO21930 in independent verification of data & declaration as ISO accordance, corrected unit errors in LCIA and LCI information

- 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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