



Nippon Electric Glass Co., Ltd.

Heat-resistant crystallized glass for fire door
FireLite Plus®


Functional unit

1m²

System boundary

☐ final products ☒ intermediate products

Raw material acquisition-Distribution-Production

Main specifications of the product

Production sites ; Otsu Plant, Shiga Takatsuki Plant

Specifications ;

Product thickness average : approx. 10mm

Weight per square meter ; apporox. 23kg

Processing method ; Crystallization & Lamination
method

Main application ; Architectural

Company Information

Nippon Electric glass Co., Ltd.

Consumer Glass Prodaucts Division, Production

Quality Assurance Department

<https://www.neg.co.jp/en/inquiry/>

Registration#	JR-BW-25002E
PCR number	PA-171190-BW-02
PCR name	Processd glass
Publication date	1 April 2025
Verification date	30 January 2025
Verification method	Product-by-product
Verification#	JV-BW-25002
Expiration date	29 January 2030

PCR review was conducted by:

Approval date	1 September 2023
PCR review panel chair	Ken Yamagishi Sustainable Management Promotion Organization

Third party verifier*

Hiroyuki Nakamura

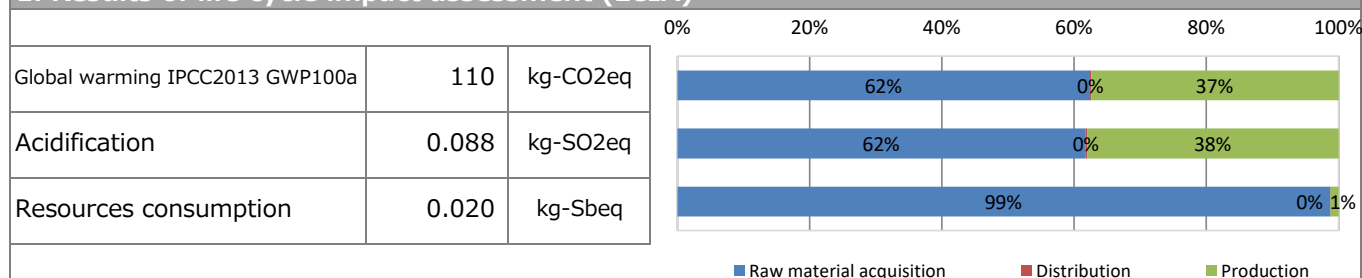
Independent verification of data & declaration in accordance
with ISO14025

☐ internal ☒ external

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

Registration number : JR-BW-25002E

1. Results of life cycle impact assessment (LCIA)



stage	Unit	Total	Raw material acquisition	Distribution	Production		
Global warming IPCC2013 GWP100a	kg-CO ₂ eq	1.1E+02	6.6E+01	2.3E-01	3.9E+01		
Ozone layer destruction	kg-CFC-11eq	7.3E-05	5.3E-05	3.1E-12	2.0E-05		
Acidification	kg-SO ₂ eq	8.8E-02	5.4E-02	2.9E-04	3.3E-02		
Urban area air pollution	kg-SO ₂ eq	5.4E-02	3.2E-02	1.1E-04	2.2E-02		
Photochemical ozone	kg-C ₂ H ₄ eq	1.5E-03	8.8E-04	8.3E-07	6.0E-04		
Toxic chemicals(cancer)	kg-C ₆ H ₆ eq	4.6E-02	4.5E-02	1.1E-06	1.1E-03		
Toxic chemicals(chronic disease)	kg-C ₆ H ₆ eq	1.4E-02	1.4E-02	7.5E-07	1.3E-04		
Aquatic toxicity	kg-C ₆ H ₆ eq	1.9E+01	1.9E+01	3.7E-08	5.8E-02		
Biological toxicity	kg-C ₆ H ₆ eq	4.8E+02	4.8E+02	6.1E-07	1.3E+00		
Eutrophication	kg-PO ₄ ³⁻ eq	2.4E-04	2.3E-04	2.4E-12	7.9E-06		
Land use(Occupation)	m ² /year	3.2E+00	2.9E+00	6.1E-03	2.5E-01		
Land use(Transformation)	m ²	1.9E-02	1.3E-02	1.2E-04	6.0E-03		
Resources consumption	kg-Sbeq	2.0E-02	2.0E-02	9.6E-07	2.6E-04		

2. Life cycle inventory analysis (LCI)

Parameter		Unit
Non-renewable material resources	1.4E+01	kg
Non-renewable energy resources	4.0E+01	kg
Non-renewable energy resources	1.8E+03	MJ
Renewable material resources	6.8E+00	kg
Renewable primary energy	3.2E+02	MJ
Consumption of freshwater	2.5E+00	m ³

3. Material composition

Material		Unit
SiO ₂ , Al ₂ O ₃ , Li ₂ O	55	%
Others (including glass cullet)	38	%
Interlayer	4	%
Packing material	4	%

4. Waste to disposal

Parameter		Unit
Hazardous waste	0.0E+00	kg
Non-hazardous waste.	1.1E+01	kg
Treated MSW for landfill	4.1E-10	kg
Treated industrial waste for landfill	1.1E+01	kg

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

5. Additional explanation

The total energy use is 2126 MJ.



6-1. Supplementary environmental information

We manufacture it at production sites that have received ISO 14001 certification (Otsu Plant and Takatsuki Plant in Shiga).

6-2. Regulated hazardous substances

Substance	CAS No.	Reference to standards or regulations
None		

7. Assumptions of secondary data used

We used the IDEA ver.3.1.0 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/resource/gpi/>)