

**LIXIL**

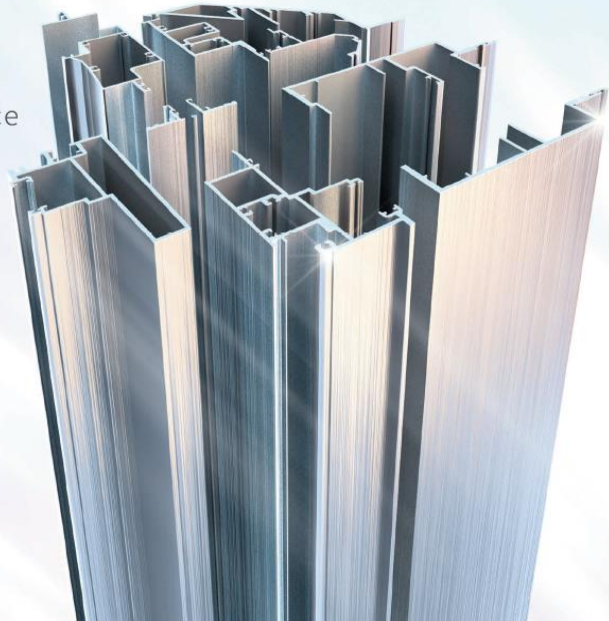
**LIXIL Corporation**

**PremiAL<sup>®</sup>R70**

building aluminum profile「PremiAL」

Low-Carbon Aluminum profiles that enhance the environmental value of buildings.

**PremiAL<sup>®</sup>R70**  
Recycled Low-Carbon Aluminum  
LIXIL



**Functional unit**

1kg

**System boundary**

final products       intermediate products

Raw material acquisition-Distribution-Production

**Main specifications of the product**

Products type:building aluminum profile

aluminum window products

(Aluminum sash for buildings, Building curtain wall, Aluminum sash for stores)

Mass range : 1~600kg

Material : aluminum

Production sites:Thai works,Shimotsuma works, Oyabe works

**Company Information**

LIXIL Corporation,Technical support "eDESK"

[edesk@lixil.com](mailto:edesk@lixil.com)

<b>Registration#</b>	JR-AD-22001E-A
<b>PCR number</b>	PA-212300-AD-03
<b>PCR name</b>	Windows
<b>Publication date</b>	12/15/2022
<b>Verification date</b>	11/28/2022
<b>Verification method</b>	Product-by-product
<b>Verification#</b>	JV-AD-22001
<b>Expiration date</b>	11/27/2027

**PCR review was conducted by:**

<b>Approval date</b>	4/1/2022
PCR review panel chair	Masayuki Kanzaki (Sustainable Management Promotion Organization)

**Third party verifier\***

Wataru Kawamura

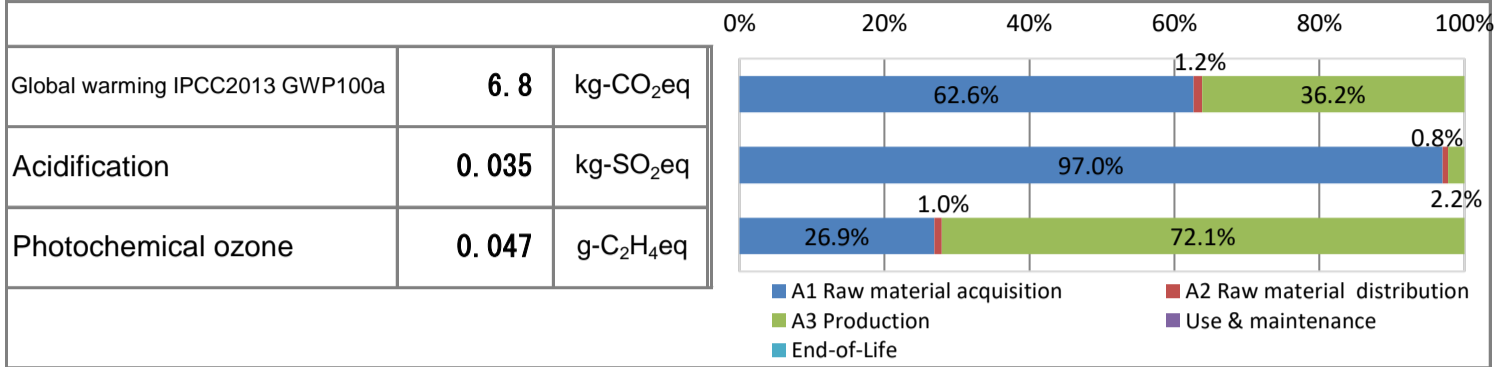
Independent verification of data & declaration in accordance with ISO14025

internal       external

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

Registration number : JR-AD-22001E-A

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



Parameter	stage	Unit	Total	A1 Raw material acquisition	A2 Raw material distribution	A3 Production	Use & maintenance	End-of-Life
Global warming IPCC2013 GWP100a		kg-CO <sub>2</sub> eq	6.8E+00	4.3E+00	7.9E-02	2.5E+00	—	—
Ozone layer destruction		kg-CFC-11eq	9.1E-07	9.0E-07	6.5E-13	1.5E-08	—	—
Acidification		kg-SO <sub>2</sub> eq	3.5E-02	3.4E-02	2.6E-04	7.8E-04	—	—
Photochemical ozone		g-C <sub>2</sub> H <sub>4</sub> eq	4.7E-02	1.3E-02	4.8E-04	3.4E-02	—	—
Eutrophication		kg-PO <sub>4</sub> <sup>3-</sup> eq	5.3E-07	5.2E-07	5.6E-16	1.0E-08	—	—

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

項目	値	単位
Non-renewable material resources	5.4E-01	kg
Non-renewable energy resources	8.4E+01	MJ
Renewable material resources	1.1E-01	kg
Renewable primary energy	8.1E-01	MJ
Consumption of freshwater	2.2E-03	m <sup>3</sup>

### 3. Material composition

Material	割合	Unit
aluminium	98 or more	%
magnesium	0.45~0.9	%
silicon	0.20~0.6	%
nickel	0.01~0.07	%

### 4. Waste to disposal

Parameter	値	Unit
Hazardous waste	1.03E-05	kg
Non-hazardous waste.	2.0E-03	kg
Treated MSW for landfill	0.0E+00	kg
Treated industrial waste for landfill	2.0E-03	kg

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

### 5. Additional explanation

Overview of transportation scenarios: For inter-country transport, the distance is calculated based on the actual data, and for others, the PCR scenario is used.



SuMPO EPD

Type III Environmental Declaration (EPD)

Registration number : JR-AD-22001E

Japan EPD Program by SuMPO

Sustainable Management Promotion Organization

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

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

#### 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
nickel sulfate	7786-81-4	Chemical Substances Control Law
boric acid	10043-35-3	chemical control law

#### 7. Assumptions of secondary data used

We use the IDEA v2.1.3 data

#### 8. Remarks

Date of change: 9/10/2024 Change from the EcoLeaf mark to the SuMPO EPD mark.

- 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/>)

Registration number : JR-AD-22001E-A