

SuMPO EPD

Type III Environmental Declaration (EPD)

Japan EPD Program by SuMPO

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

Nakamoto Zourin Co., Ltd

Registration number: JR-BC-20003E-A

Yakisugi[Shou Sugi Ban]/Pika-Pika







浮造 Pika-Pika

Pika-Pika施工例(米国) 浮造施工例(日本)

# **Functional unit**

1 m2 (15mm thick)

### **System boundary**

☐ final products ■intermediate products

- Inclusive of: A1 Raw Material Supply, A2 Transport, A3 Manufacturing

# Main specifications of the product

- Weight: 6.1kg/m2 - No paint applied

- Production sites: Hiroshima and Tokushima

# **Company Information**

Nakamotozourin Co.,Ltd https://nakamotozourin.co.jp NakamotoForestry North America https://nakamotoforestry.com NakamotoForestry Europa https://nakamotoforestry.eu

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R	legistration#	JR-BC-20003E-A				
	PCR number	PA-120000-BC-03				
	PCR name	Wood, Wood Materials				
Pu	iblication date	3/28/2025				
Ve	rification date	3/24/2025				
Ver	ification method	Product-by-product				
\	/erification#	JV-BC-24003				
E	xpiration date	3/23/2030				
PCR review was conducted by:						
	Approval date	17/Nov/2023				
	PCR review	Ken Yamagishi				
	panel chair	Sustainable Management Promotion Organization				

### Third party verifier\*

Yuki Sakamoto

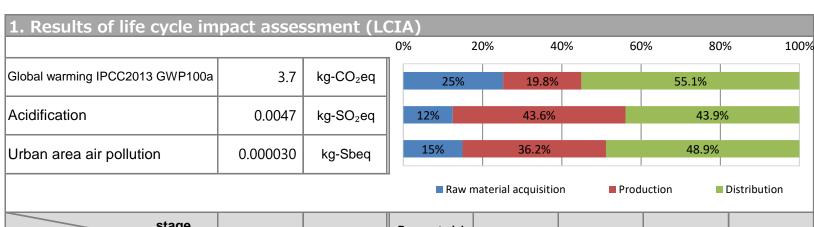
Independent verification of data & declaration in accordance with ISO14025

> □internal ■ external

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<sup>\*</sup>Auditor's name is stated if system certification has been performed.

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Stage Parameter	Unit	Total	Raw material acquisition	Production	Distribution	
Global warming IPCC2013 GWP100a	kg-CO₂eq	3.7E+00	9.2E-01	7.3E-01	2.0E+00	
Ozone layer destruction	kg-CFC-11eq	3.3E-07	8.7E-08	9.8E-12	2.4E-07	
Acidification	kg-SO₂eq	4.7E-03	5.8E-04	2.0E-03	2.1E-03	
Urban area air pollution	kg-SO₂eq	2.3E-03	3.4E-04	8.3E-04	1.1E-03	
Photochemical ozone	kg-C₂H₄eq	4.7E-05	8.8E-06	1.6E-05	2.3E-05	
Toxic chemicals(cancer)	kg-C <sub>6</sub> H <sub>6</sub> eq	2.4E-04	2.1E-04	3.6E-06	2.7E-05	
Toxic chemicals(chronic disease)	kg-C <sub>6</sub> H <sub>6</sub> eq	5.0E-05	4.1E-05	2.4E-06	6.3E-06	
Aquatic toxicity	kg-C <sub>6</sub> H <sub>6</sub> eq	2.1E-01	2.1E-01	1.2E-07	1.9E-03	
Biological toxity	kg-C <sub>6</sub> H <sub>6</sub> eq	1.3E+00	1.3E+00	1.9E-06	4.7E-02	
Eutrophication	kg-PO <sub>4</sub> 3-eq	1.8E-04	1.8E-04	7.5E-12	6.0E-08	
Land use(Occupation)	m²/year	3.9E+01	3.8E+01	7.8E-02	1.4E-02	
Land use(Transformation)	m <sup>2</sup>	2.2E-03	2.9E-04	1.6E-03	3.1E-04	
Resources consumption	kg-Sbeq	3.0E-05	1.6E-05	3.0E-06	1.1E-05	

2. Life cycle inventory analysis (LCI)			
Parameter		Unit	
Non-renewable material resources	3.0E-02	kg	
Non-renewable energy resources	1.2E+00	kg	
Non-renewable energy resources	5.3E+01	MJ	
Renewable material resources	9.8E+00	kg	
Renewable primary energy	7.7E+00	MJ	
Consumption of freshwater	3.8E+01	m <sup>3</sup>	

3. Material composition			
Material		Unit	
Yakisugi	6.1.E+00	kg	
Hot Melt	5.4.E-03	kg	
Packing Material (Shrink Film)	5.6.E-03	kg	
Packing Material (PP Band)	4.4.E-04	kg	

4. Waste to disposal			
Parameter		Unit	
Hazardous waste	-	kg	
Non-hazardous waste.	3.82E-03	kg	
Treated MSW for landfill	3.98E-11	kg	
Treated industrial waste for landfill	3.82E-03	kg	

<sup>\*</sup>Data derived from LCA and not assigned to the impact categories of LCIA

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# 5. Additional explanation

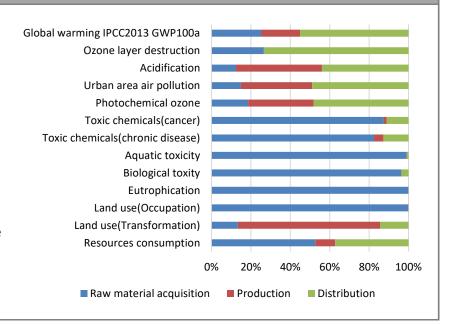
For the analysis, a set of foreground data was first prepared based on the foreground data collected for one year (October 2023 to September 2024) and then they were multiplied by the pertinent background data to estimate environmental loads. Transportation was calculated by collecting actual data over one year. As the product is manufactured in the plants in Hiroshima and Tokushima Prefectures, the averages of data taken from the two plants were used to represent the product data.

The analysis revealed that dominant stages varied depending on the LCI parameters.

The carbon storage was calculated based on Annex F of the PCR as follows:

Carbon Storage (kg-C)

 $=6.06 \text{ (kg-wood)} \times 0.5 = 3.03 \text{ (kg-C)} (=11.1 \text{kg-CO2})$ 



# 6-1. Supplementary environmental information

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6-2. Regulated hazardous substances			
Substance	CAS No.	Reference to standards or regulations	
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## 7. Assumptions of secondary data used

Inventory Database: IDEA Ver.3.1.0

# 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/)
- This is a selfdeclared translation of EPD that can be accessed at [検証済みEPDへのリンクを追加してください] and is published for convenience purposes. Only the original EPD is valid and binding between parties.

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