

Product Carbon Footprint Verification Statement

The Carbon Footprint Study of Product
**1 kilogram of The junction box potting agent in the
ground photovoltaic module sealing material**

which was conducted by

**Gucheng Xingfa New Materials
Co., Ltd.**

Sancha Village, Nanhe Town, Gucheng County, Hubei Province, P.R. China

has been verified by SGS as meeting the requirements of
ISO 14067:2018

The carbon footprint of 1 kilogram of The junction box potting agent in the ground
photovoltaic module sealing material is 10.21 kilograms of CO₂ equivalent

For the life cycle stages of the product:
from cradle to gate



Authorized by
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SGS-CSTC Standards Technical Services Co., Ltd. (hereinafter referred to as “SGS”) has been commissioned by Gucheng Xingfa New Materials Co., Ltd. (hereinafter referred to as “the client”) to verify the carbon footprint (hereinafter referred to as “CFP”) study and statement of product 1 kilogram of The junction box potting agent in the ground photovoltaic module sealing material (hereinafter referred to as “the product system”) conducted by Gucheng Xingfa New Materials Co., Ltd. (hereinafter referred to as “the responsible party”), in accordance with

ISO 14064-3:2019

Roles and Responsibilities

The responsible party is responsible for the management of the product GHG information system, the development and maintenance of records and reporting procedures in accordance with ISO 14067:2018, including the calculation and determination of the life cycle GHG emissions and removals of the product system, and preparing the CFP study report and the CFP statement.

It is SGS’s responsibility to express an independent verification opinion on the responsible party’s statement on the CFP of the product system.

SGS has conducted a third-party verification of the provided CFP study from May 12, 2025 to May 12, 2025. The verification was based on the verification scope, objectives and criteria as agreed between the client and SGS.

Level of Assurance

The level of assurance agreed upon was that of reasonable assurance.

Scope

The client has commissioned an independent verification to SGS on the CFP study of the product system to verify the conformance with ISO 14067:2018 with the scope of the verification as outlined below:

- The CFP Study: CFP Study Report of The junction box potting agent in the ground photovoltaic module sealing material, Ver1.0, May 10, 2025.
- The product system: 1 kilogram of The junction box potting agent in the ground photovoltaic module sealing material.
- Product Category Rule (PCR): None.
- Functional unit: 1 kilogram of The junction box potting agent in the ground photovoltaic module sealing material.

- System boundary: It included the raw material acquisition stage and the manufacturing stage.
- Data resources: the primary data were collected from manufacturing sites. The secondary data were collected from Ecoinvent 3.11.
- GWP: IPCC 2021 GWP values were applied in the study.
- Life cycle assessment tool: SimaPro, version 10.2.
- Cut-off rules: In general, all processes and flows that were attributable to the product system are included. Based on the product input/output proportion, materials/energy inputs/outputs with a mass/energy contribution of less than 1% may be excluded, but the total proportion of excluded materials/energy must not exceed 5%.
- Allocation rules:
 - Wherever possible, allocation was avoided.
 - Where allocation could not be avoided, allocation was conducted in a way reflecting the underlying physical relationships.
 - Allocation was conducted based on other relationships other than physical relationships.
- Manufacturing locations: BAOJIWAN INDUSTRIAL PARK, GUCHENG ECONOMIC DEVELOPMENT ZONE, GUCHENG COUNTY, XIANGYANG CITY, HUBEI PROVINCE.
- GHG emissions and removals of the product system included: please refer to the CFP study report provided by the responsible party: CFP Study Report of The junction box potting agent in the ground photovoltaic module sealing material, Ver1.0, May 10, 2025.
- GHGs included: CO₂, CH₄, N₂O, NF₃, SF₆, HFCs, and PFCs, as listed in the latest IPCC Assessment Report.
- Mitigation: There was no carbon offsetting used in this CFP study.
- The time boundary for data: from January 1, 2024 to December 31, 2024.
- Intended user of the verification statement: customer, the public, investors, etc.

Objective

The purposes of this verification are, by review of objective evidence, to independently verify:

- Whether the CFP study was conducted according to ISO 14067:2018.
- Whether the life cycle GHG emissions and removals of the product system were as declared by the product's CFP study report.
- Whether the data reported were accurate, complete, consistent, transparent and free of material error or omission.

Criteria

The criteria used by the responsible party to conduct this CFP study was ISO 14067:2018, against which SGS used to make the verification conclusion.

Materiality

The materiality required for the verification was considered by SGS as 5%, based on the needs of the intended user of the GHG Assertion.

Conclusion

The responsible party has conducted the CFP study and made the GHG assertion in accordance with the requirements of ISO 14067:2018. SGS concludes with a reasonable level of assurance that the presented GHG statement on the carbon footprint of the product above is materially correct and is a fair representation of the GHG emissions and removals, complying with the requirements of the criteria outlined above.

The CFP of the product is 10.21 kilograms of CO₂ equivalent per 1 kilogram of The junction box potting agent in the ground photovoltaic module sealing material.

The life cycle GHG emissions of the product system for each life stage are described below:

Life Cycle Stages	GHG Emissions	Unit
Raw material acquisition	9.97	kilograms of CO ₂ equivalent
Production	0.24	kilograms of CO ₂ equivalent
Total	10.21	kilograms of CO ₂ equivalent

SGS's approach was risk-based, drawing on an understanding of the risks associated with reporting the life cycle GHG emissions of product information and the controls in place to mitigate these risks. Our examination included an assessment of evidence relevant to the amounts and disclosures in relation to the organization's reported life cycle GHG emissions of the product.

We planned and performed our work to obtain the information, explanations and evidence that we considered necessary to provide a reasonable level of assurance.

We conducted the verification with regard to the GHG assertion of the CFP study which included an assessment of the GHG information system, monitoring and reporting plan/protocol. This assessment included the collection of evidence supporting the reported data, and checking whether the provisions of the protocol reference, were consistently and appropriately applied.

This statement shall be interpreted with the CFP study report of CFP Study Report of The junction box potting agent in the ground photovoltaic module sealing material, Ver1.0, May 10, 2025. If the carbon footprint of the product changes by more than 10%, it shall undergo re-verification by SGS to maintain the validity of this statement.

Note: This Statement is issued, on behalf of the Client, by SGS-CSTC Standards Technical Services Co., Ltd. ("SGS") under its General Conditions for Green Gas Verification Services available at http://www.sgs.com/terms_and_conditions.htm. The findings recorded hereon are based upon an audit performed by SGS. A full copy of this statement, the findings and the supporting GHG Assertion may be consulted at the responsible party. This Statement does not relieve Client from compliance with any bylaws, federal, national or regional acts and regulations or with any guidelines issued pursuant to such regulations. Stipulations to the contrary are not binding on SGS and SGS shall have no responsibility vis-à-vis parties other than its Client.

This carbon footprint verification statement is executed in English, with a Chinese version provided. In the event of any discrepancies between the translations, the English version shall take precedence.