Ensinger GmbH . Rudolf-Diesel-Straße 8 . 71154 Nufringen . Germany

PRESSE RELEASE

Nufringen, March 19, 2025

**Product footprint of semi-finished products**

**EPSM establishes standard for PCF calculation**

An industry-wide standard for calculating the Product Carbon Footprint (PCF) for semi-finished products has been developed in 2025:

The members of the EPSM (Engineering Polymer Shapes for Machining Association, a sector group of EuPC – Ensinger, Gehr, Licharz, Röchling and Zell Materials – have come together to establish a common framework for calculating the Product Carbon Footprint (PCF) of technical plastic stock shapes. This collective commitment represents a major step forward in promoting environmental measures for greater transparency, comparability and commitment throughout the semi-finished products industry.

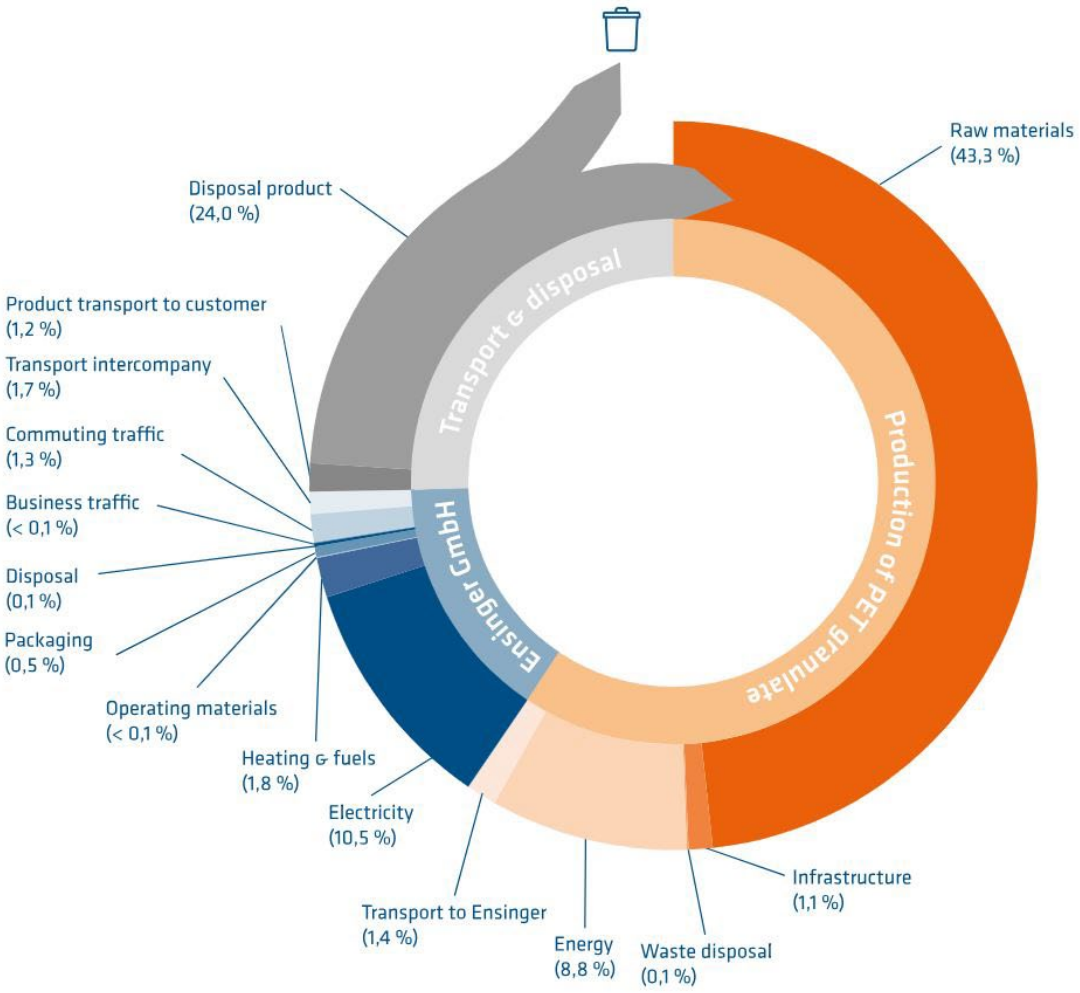
By aligning on a standardised method for PCF calculation, EPSM members are enabling customers to make more informed decisions based on verifiable environmental data. Consistency in PCF calculation across the market ensures that the environmental performance of products can be objectively measured and compared, driving innovation and continuous improvement throughout the value chain.

This initiative aims to help strengthen the credibility of engineering plastics in a world increasingly concerned with assessing and reducing emissions.

More Information

https://www.ensingerplastics.com/en/sustainability

The **Ensinger Group** is engaged in the development, manufacture and sale of compounds, semi-finished materials, composites, technical parts and profiles made of engineering and high-performance plastics. To process the thermoplastic polymers, Ensinger uses a wide range of production techniques, such as extrusion, machining, injection moulding, casting, sintering and pressing. With more than 2,500 employees at over 30 locations, the family-owned enterprise is represented worldwide in all major industrial regions with manufacturing facilities or sales offices.




*Picture caption:*

The footprint of a product reflects the amount of greenhouse gases associated with its manufacture along the value chain and is increasingly being taken into account in the development of components and systems. The diagram shows the greenhouse gas emissions over the entire product life cycle from the "cradle" (crave), the synthesis of the polymer, to disposal (grave) using the example of one kilogram of semi-finished PET material. The proportion of emissions caused by moulding of the raw material at Ensinger is around 15 %. By far the largest proportion of emissions comes from the synthesis (polymerisation) of the material. The individual use of the material by the consumer is excluded from the analysis.


Ensinger

The following declaration applies to 1 kg of the following product produced at Ensinger GmbH, Nufringen, Germany.

| Impact | Product name | PCF value | Unit |
|---|---|---|---|
| Global warming potential, GWP | TECAPEEK natural | 18.9 | kg CO2eq |

Life Cycle Assessment Background Information

**Calculation methods:** Follows DIN EN ISO 14040 series standards; IPCC 2021 GWP 100a was used for the assessment.

**Calculation date: Mrz 2025**

**System boundary:** Cradle-to-gate, no data exclusion.

**Data collection period:** The primary data refers to average production conditions in the years 2020 - 2024. Background data is not older than 5 years.

**Date source:** The result is based on the latest version of sources like the ecoinvent database (V3.11), average industry data and primary data from Ensinger. Values from suppliers (primary data) are only used if they are reliable and have been checked in accordance with the EPSM commitment letter.

**Allocation:** Since energy consumption, raw materials, supplies and waste in the process are not managed separately for product and by-products, a quantitative breakdown was considered. For by-products, a closed-loop system was considered, as long as they are reused.

**Limitation of use:** Our product footprints are updated every 2 years. The information on the product footprint should no longer be used if its calculation date is more than two years in the past and should be requested again from Ensinger.

**Date: 31.03.2025**

**Disclaimer:** This declaration is based on a review of recent composition data and information supplied by the vendors. The information and the LCA results hereinabove are provided "as is", at the discretion of the disclosing company, without guarantee, warranty or representation of any kind, express or implied, including but not limited to, as to (i) their accuracy or completeness, (ii) their fitness for a particular purpose and non-infringement of third parties' intellectual property rights, and (iii) their use. Ensinger shall incur no liabilities in connection with the foregoing. According to ISO 14040-44 standards, the use of LCA results to support comparative assertions intended to be disclosed raises special concerns and requires specific critical review. No critical review of these data was performed. Providing this information to a third party without the approval of Ensingers is prohibited.

Ensinger GmbH • Rudolf-Diesel-Straße 8 • 71154 Nufringen • Germany
Phone +49 7032 819 0 • info@ensingerplastics.com • ensingerplastics.com

*Picture caption:*

Product Carbon Footprint (PCF) of the semi-finished product TECAPEEK natural.

For editorial queries

**Ensinger GmbH**, Nufringen, Germany

Jörg Franke, Head of Corporate Communications

Tel. +49 (0) 7032 819 202

ensingerplastics.com

joerg.franke@ensingerplastics.com