



Product Carbon Footprint

Comparison of the products
PP-film sealing plate and aluminum-film
sealing plate

Product Carbon Footprint

Comparison sealing plates

On behalf of Profol GmbH, ClimatePartner has carried out a CO₂ comparative calculation of the products PP-film sealing plate and aluminum-film sealing plate.

The cradle-to-customer approach was followed in the calculation. Thus, the life cycle phases considered, include the extraction of raw materials and packaging, the manufacture of the product and the delivery of the goods to the end customer.

For the calculation of the PP film seal plate, primary data from the company on the electricity consumption of the production process were available. These were completed by an emission factor for extrusion film (plastic), which considers other emissions arising during production. A database emission factor for PP granulate was applied to the raw material. For packaging, primary data from the producing company was available. The emissions for these packaging materials were calculated based on database values for PE film and wooden pallets from ecoinvent.

No primary data were available for the calculation of the aluminum film sealing plate, therefore approximate values from the ecoinvent database were used. According to this, it is an estimation of the emissions. The same conditions were assumed for logistics and packaging as for the PP film seal plate.

The following assumptions were made regarding weight, diameter, raw material and the production process:

	PP-film sealing plate	Aluminum-film sealing plate
Weight [g]	0.549	0.651
Diameter [mm]	75.0	75.0
Raw material	PP-granulate	Aluminum
Production process	Primary data from production of Profol GmbH, complemented by extrusion film (plastic) (Quelle: ecoinvent, version 3.3 (2016), Extrusion production, plastic film, RER)	Sheet rolling (aluminum) (Quelle: ecoinvent, version 3.3 (2016), sheet rolling, aluminum RER)

Product Carbon Footprint sealing plate parts per million

Overview	PP-film sealing plate [kg CO ₂]	Aluminum-film sealing plate [kg CO ₂]
Inbound logistics	27.20	32.20
Outbound logistics	46.60	55.00
Packaging	8.10	8.10
Raw materials	1,128.70	5,530.30
Production process	242.30	379.10
Total emissions	1,452.90	6,004.80

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About ClimatePartner

ClimatePartner is a leading solutions provider for corporate climate protection. Together with its clients, ClimatePartner implements customized solutions for calculating and offsetting CO₂ emissions to achieve climate neutrality for companies, services and products. The related IT solution is TÜV-Austria certified. The company was founded 2006 in Munich and has 70 employees today and more than 2,000 customers.

Contact

If there are any questions, we are happy to provide you with personal support. Contact us at support@climatepartner.com or by phone at +49 89 122 28 75-10.

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