

RAW MATERIAL SUMMARY & LIFE CYCLE ASSESSMENT

Formavoid Carbon Neutral Polymer









The Formavoid Carbon Neutral Polymer combines 100% recycled polypropylene with a bio-based climate positive additive (CPA), generating enough carbon offset to make the raw material blend at least carbon neutral.

PROPERTIES	
Material Composition	95% Mineral Reinforced Recycled Polypropylene, 5% CPA
Colour	Black
Tensile Strength	22-26MPa
E-modulus	1250-1350MPa
Charpy Notched Impact	>6KJ/m²

Bio-Based Climate Positive Additive (CPA)

CPA uses unsorted, residual municipal waste as its primary feedstock, diverting it from highemission landfill. Robust close-loop technology valorises municipal waste and coverts it into safe, durable and recyclable thermoplastic feedstock.

 $1 \text{kg CPA} = -11.7 \text{kg/CO}_2 \text{eq (GWP20)}$

Figures calculated using UNFCC methodology in conjunction with IPCC data.













Results reviewed and validated by Ouantis





Formavoid Carbon Neutral Polymer

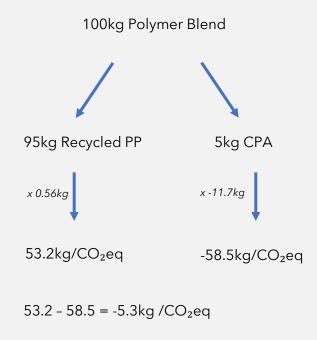
Carbon Neutral Worked Example

Given: 1kg CPA = -11.7kg/CO₂eq (GWP20)

Figures calculated using UNFCC methodology in conjunction with IPCC data.

Assuming: 1kg Recycled PP = 0.56kg/CO₂eq

Figures calculated based on recycled PP having 80% less carbon emissions than virgin PP.



Based on the above worked example, and to the best of our knowledge, it can be assumed the polymer blend has a negative carbon effect and therefore is at least carbon neutral.

The above calculations are for illustrative purposes only. Calculations may not be an exact representation and are not intended to be relied upon. A typical carbon value for recycled polypropylene has been assumed.



Last Revised December 2022