5126 RE

Product description

Colour	Weight (mg)	Size (mm)	Bulk density (g/l)	Packaging	Approved for direct food contact
Black	1.0	2.5 – 5.0	24.5 – 27.5	Bag	No

Physical properties

	Test method	35g/l	50g/l
Compressive strength 25% strain (kPa) 50% strain (kPa) 75% strain (kPa)	 ISO 844 5mm/min	 175 250 550	 275 370 800
Compression set 25% strain – 22 hours – 23°C (%)	ISO 1856 (Method C) Stabilising 24h	12.0	11.5
Burn rate (mm/min)	ISO 3795 12.5mm thick	70	50

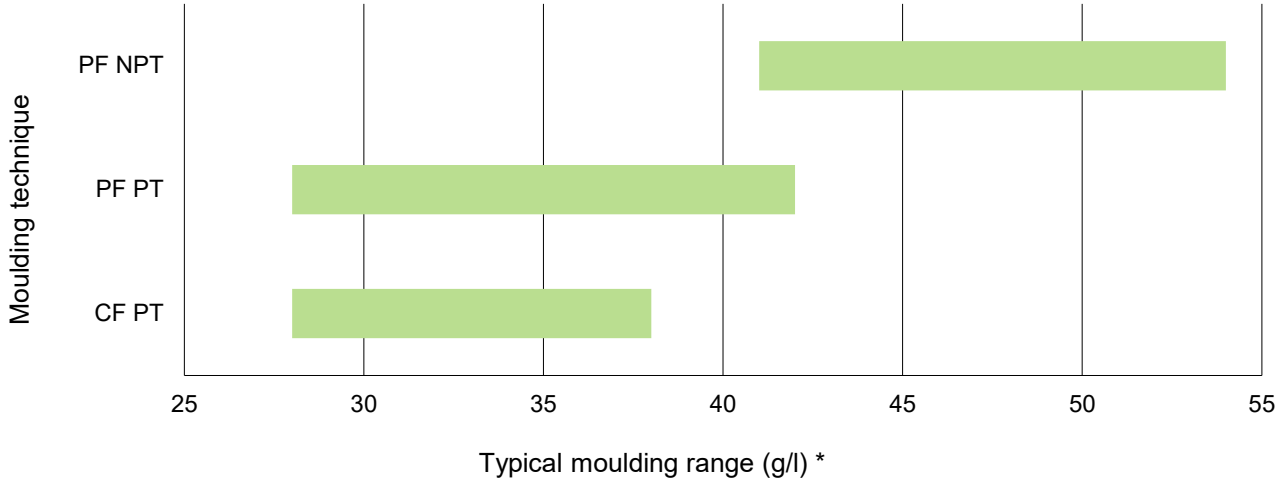
ARPRO 5126 RE contains 30% recycled content from post-consumer EPP waste. The carbon footprint of this grade is 1.74 kg CO_2 eq. / kg ARPRO. This is a 16% reduction in CO_2 emissions compared to ARPRO made from virgin raw materials.

Moulding

ARPRO 5126 RE can be moulded using Crack Fill (CF) and Pressure Fill (PF):

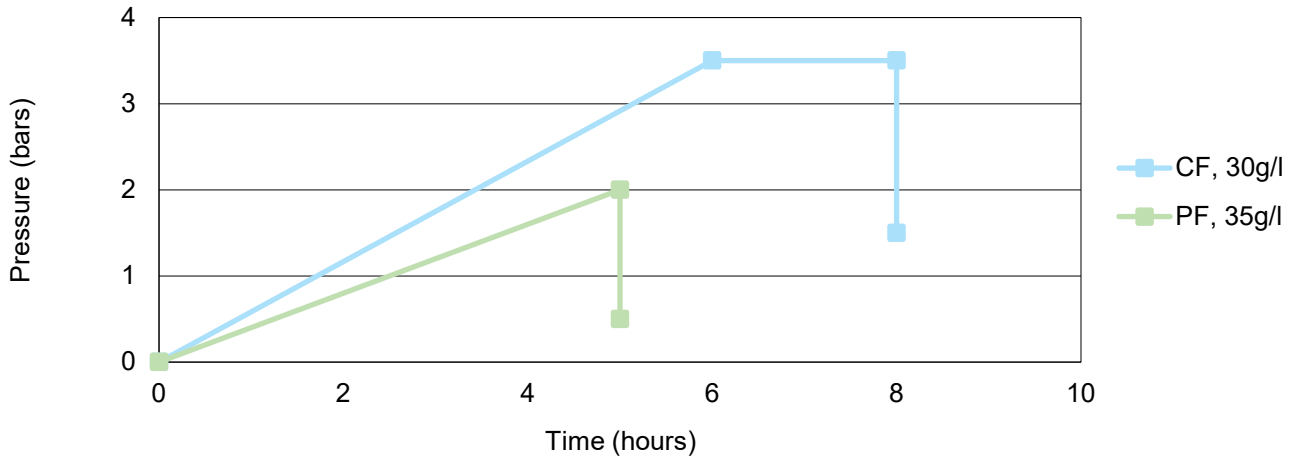
Crack fill: preferably applied to Pre-Treated (PT) ARPRO.

Pressure fill: applied to either Pre-Treated (PT) or Non-Pre-Treated (NPT) ARPRO.



* Shrinkage, surface aspect and cycle time are influenced by process parameters, tool and equipment layout, and part geometry.

Pre-treatment
Recommended pre-treatment cycle with pressure tank environment and incoming compressed air both at 23°C:
Crack fill: 6 hours up to 3.5 bar, hold 2 hours at 3.5 bar, decrease and maintain at 1.5 bar throughout production.
Pressure fill: 5 hours up to 2 bar, decrease and maintain at 0.5 bar throughout production.



Pre-treatment cycles can be adapted according to moulding process, density and part geometry:
If internal cell pressure is too high, this may lead to fusion issues. In this case, decrease time, pressure or temperature to improve fusion.
Increase time, pressure or temperature to reduce moulded density and improve aspect.
Operating the pressure tank above ambient temperature, up to a maximum of 50°C, significantly shortens pre-treatment time.

Post-treatment
For moulded densities below 50g/l and depending on the parts dimensions, post-treatment at a temperature of 80°C is recommended for 3 to 8 hours. This helps to remove water content, as well as ensuring dimensional stability and a geometric shape.

Shrinkage
Typical values range from 2% to 2.6%. The higher the moulded density, typically the lower the shrinkage.

Storage
A storage temperature above 15°C is strongly recommended.
Indoor storage strongly recommended.
If stored outdoors, it is strongly recommended to keep the material indoors for 24 hours before moulding.