

Product description

Colour	Weight (mg)	Size (mm)	Bulk density (g/l)	Packaging	Approved for direct food contact
Black	1.0	2.5 – 4.5	30.0 – 36.0	Bulk / Bag	No

Physical properties

	Test method	45g/l	60g/l
Compressive strength			
25% strain (kPa)	ISO 844	240	340
50% strain (kPa)	5mm/min	340	475
75% strain (kPa)		720	1,000
Compression set	ISO 1856 (Method C)		
25% strain – 22 hours – 23°C (%)	Stabilising 24h	11.5	11.5
Burn rate (mm/min)	ISO 3795		
	12.5mm thick	55	40



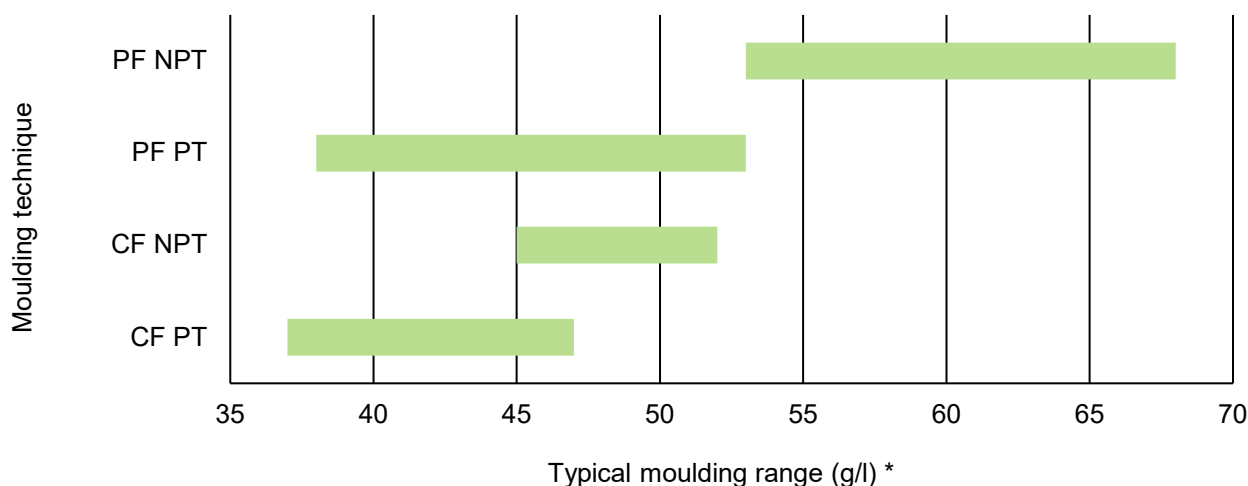
ARPRO 5133 RE contains 30% recycled end-of-life moulded parts. Its production contributes to reduce CO₂ emissions by 12% compared to ARPRO Black!

Moulding

ARPRO 5133 RE can be moulded using Crack Fill (CF) and Pressure Fill (PF):

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

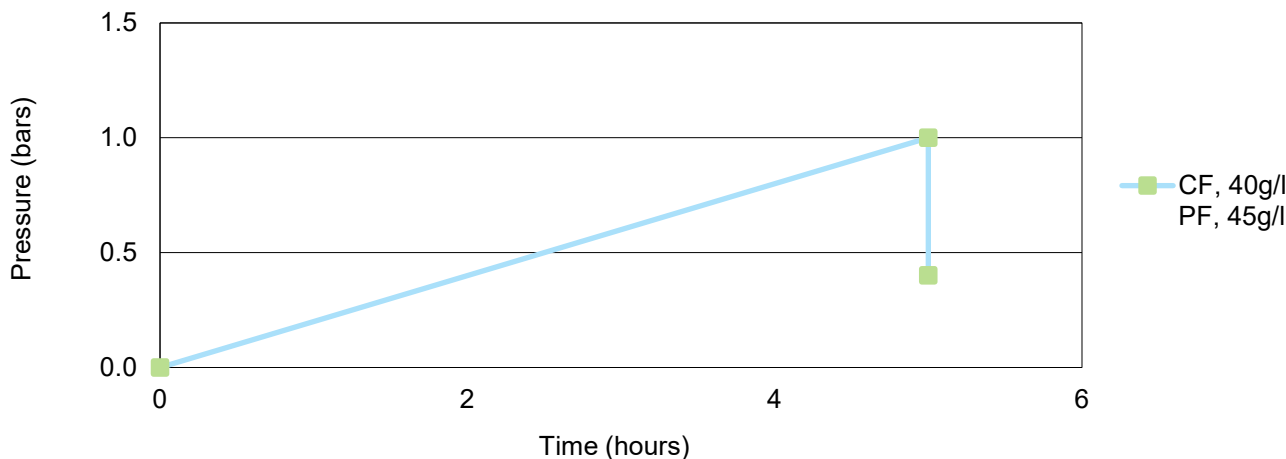
Pressure fill: applied to either Pre-Treated (PT) or Non-Pre-Treated (NPT) ARPRO.



* 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:
5 hours up to 1 bar, decrease and maintain at 0.4 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 1.8% to 2.2%. 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.