

Product description

Colour	Weight (mg)	Size (mm)	Bulk density (g/l)	Packaging	Approved for direct food contact
Black	1.0	2.0 – 4.0	39.0 – 43.0	Bulk / Bag	Yes

Physical properties

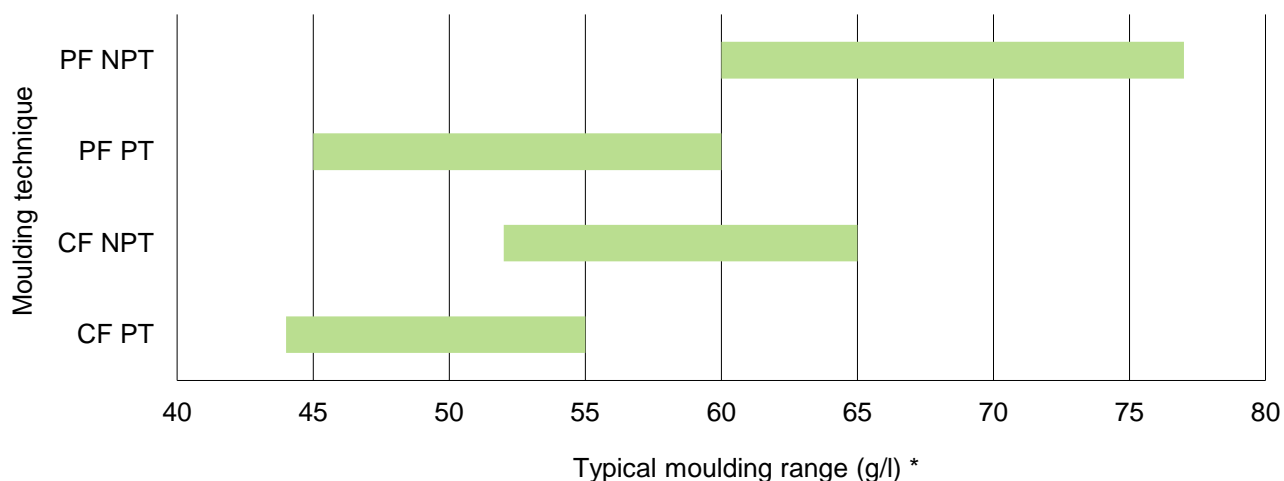
	Test method	55g/l	70g/l
Compressive strength			
25% strain (kPa)	ISO 844	310	425
50% strain (kPa)	5mm/min	420	580
75% strain (kPa)		900	1,250
Tensile strength (kPa)			
Tensile elongation (%)	ISO 1798	860	1,070
		26	23
Compression set			
25% strain – 22 hours – 23°C (%)	ISO 1856 (Method C) Stabilising 24h	11.5	11.0
Burn rate (mm/min)	ISO 3795 12.5mm thick	45	35

Moulding

ARPRO 5142 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.

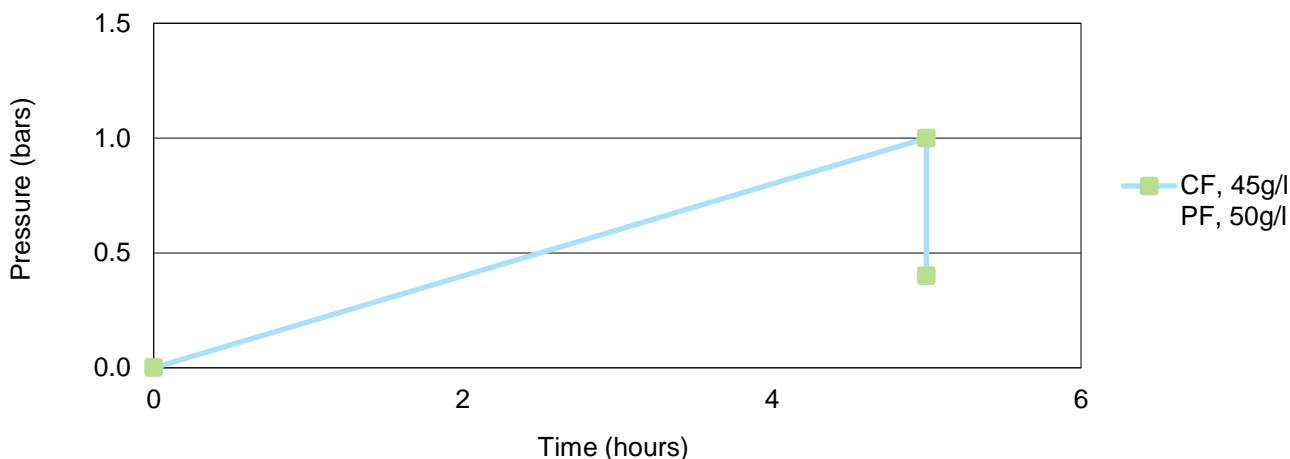
Pressure fill: applied to either Pre-Treated (PT) or Non-Pre-Treated (NPT) ARPRO.



* 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.