

Product description

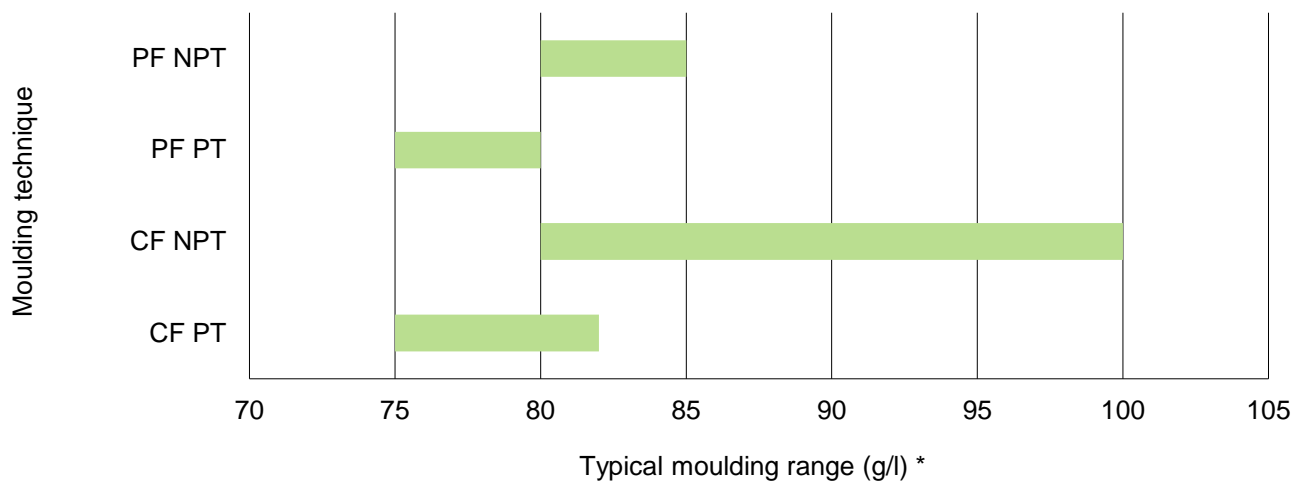
Colour	Weight (mg)	Size (mm)	Bulk density (g/l)	Packaging	Food approved
Black	1.2	1.5 – 3.0	65.0 – 75.0	Bulk / Bag	Yes

Physical properties

	Test method	80g/l	95g/l
Compressive strength 25% strain (kPa) 50% strain (kPa) 75% strain (kPa)	ISO 844 5mm/min	500 700 1,600	655 890 2,080
Tensile strength (kPa) Tensile elongation (%)	ISO 1798	1,210 22	1,415 20
Compression set 25% strain – 22 hours – 23°C (%)	ISO 1856 (Method C) Stabilising 24h	11.0	11.0
Burn rate (mm/min)	ISO 3795 12.5mm thick	30	25

Moulding

ARPRO 5170 can be moulded using Crack Fill (CF) and Pressure Fill (PF) with Pre-Treated (PT) or Non-Pre-Treated (NPT) ARPRO in both processes.

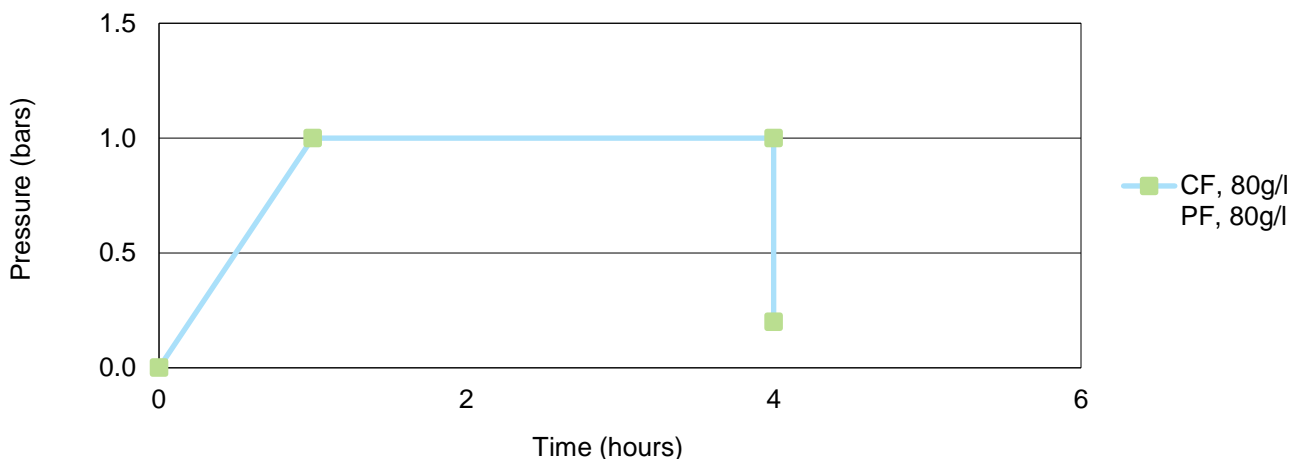


* Shrinkage, surface aspect and cycle time are influenced by process parameters, tool and equipment layout, and part geometry.

Pre-treatment

Pressure tank environment and incoming compressed air should both be at 23°C:

1 hour up to 1 bar, hold for 3 hours at 1 bar, decrease and maintain at 0.2 bar throughout production.



Processing

Cycle 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

No post-treatment is required. Stabilisation to ambient conditions for 4 hours before dimensional quality testing is recommended. For highly compressed parts, post-treatment is compulsory to obtain a nice surface aspect, for example 3 to 8 hours at a temperature of 80°C.

Shrinkage

Typical values range from 1.8% to 2.2%. The higher the moulded density, typically the lower the shrinkage.

Storage

Temperature: >15°C

Indoor storage strongly recommended.

If stored outdoors, it is strongly recommended to keep the material indoors for 24 hours before moulding.