

## Product description

Colour	Weight (mg)	Size (mm)	Bulk density (g/l)	Packaging	Food approved
Black	1.2	3.5 – 6.0	14.5 – 17.5	Bulk / Bag	No

## Physical properties

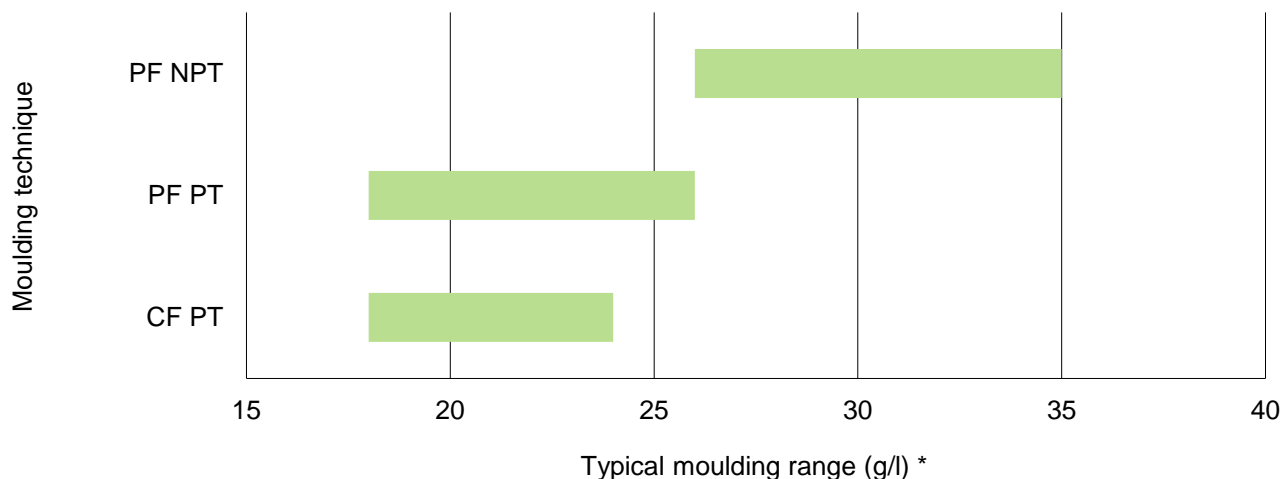
	Test method	20g/l	30g/l
Compressive strength	ISO 844		
25% strain (kPa)	5 mm/min	80	150
50% strain (kPa)		150	220
75% strain (kPa)		370	460
Tensile strength (kPa)	ISO 1798	340	490
Tensile elongation (%)		32	30
Compression set	ISO 1856 (Method C)		
25% strain – 22 hours – 23°C (%)	Stabilising 24h	12.5	12.0
Burn rate (mm/min)	ISO 3795		
	12.5mm thick	115	80

## Moulding

ARPRO 5116 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.



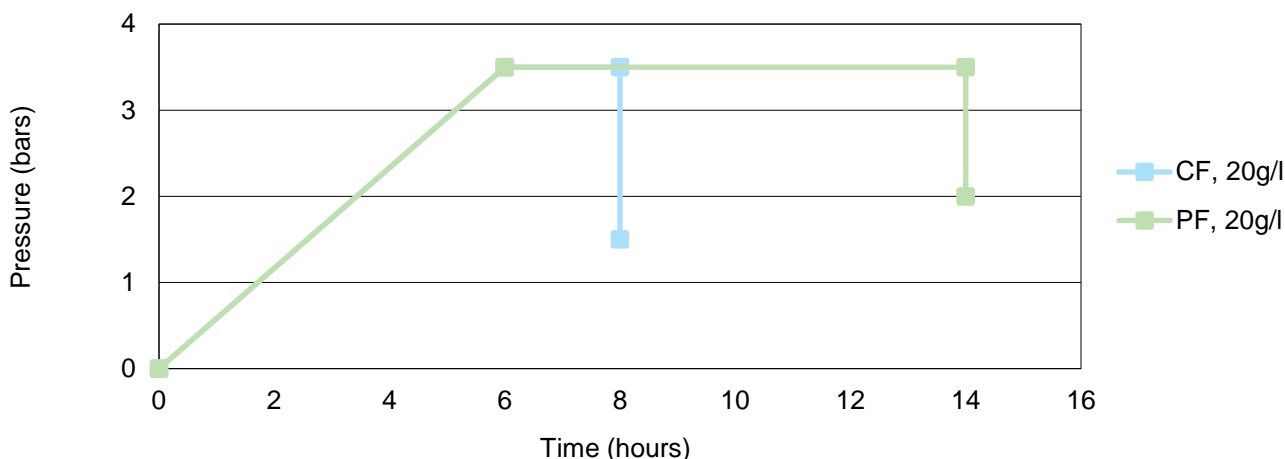
\* Shrinkage, surface aspect and cycle time are influenced by process parameters, tool and equipment layout, and part geometry.

### Pre-treatment

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

Crack fill: 6 hours up to 3.5 bar, hold at 3.5 bar for 2 hours, decrease and maintain at 1.5 bar throughout production.

Pressure fill: 6 hours up to 3.5 bar, hold at 3.5 bar for 8 hours, decrease and maintain at 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

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 3.5%. 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.