

Product description

Colour	Weight (mg)	Size (mm)	Bulk density (g/l)	Packaging	Approved for direct food contact
Black	1.2	1.5 – 3.0	88.0 – 102.0	Bag	No

Physical properties

	Test method	105g/l	115g/l
Compressive strength			
25% strain (kPa)	ISO 844	750	850
50% strain (kPa)	5mm/min	1,000	1,140
75% strain (kPa)		2,250	2,600
Tensile strength (kPa)		1,120	1,300
Tensile elongation (%)	ISO 1798	14	14
Compression set			
25% strain – 22 hours – 23°C (%)	ISO 1856 (Method C) Stabilising 24h	11.5	11.5
Burn rate (mm/min)	ISO 3795 12.5mm thick	10	10



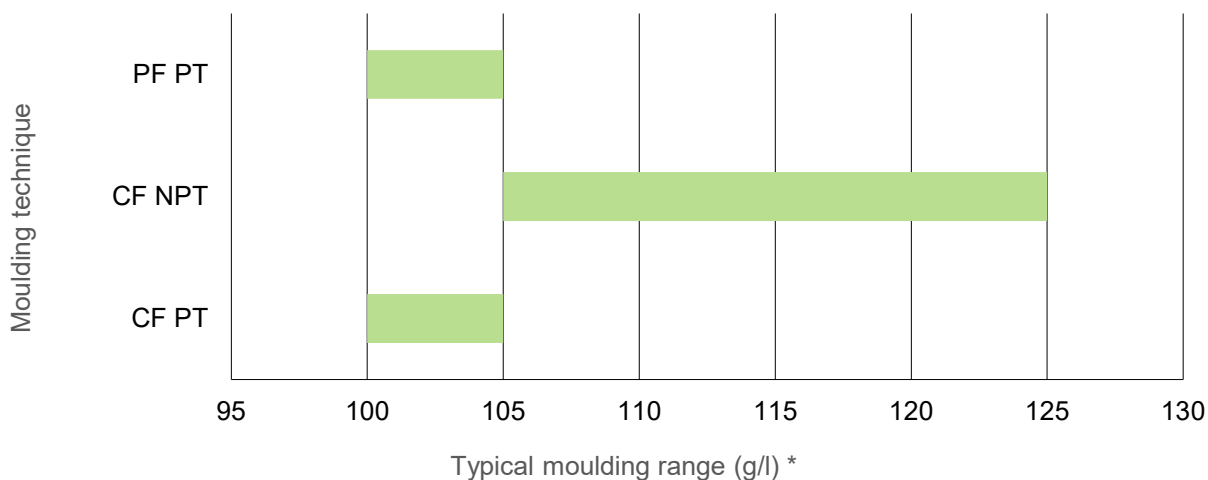
ARPRO 5195 RR is intended to reduce the electromagnetic interference between sensors. A 1-cm thick plank of this material helps to reduce the power of a radar signal with a frequency of 75-80 GHz by nearly 20dB, meaning by a factor of 100!

Moulding

ARPRO 5195 RR 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.

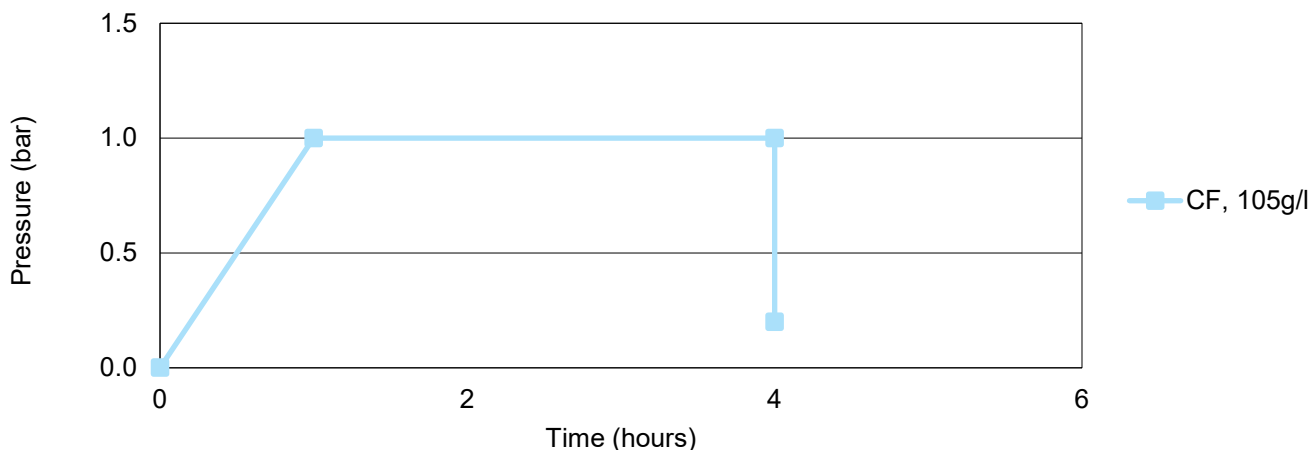
Pressure fill: only applied to Pre-Treated (PT) ARPRO.



* 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:
 1 hour up to 1 bar, hold for 3 hours at 1 bar, decrease and maintain at 0.2 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

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

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.