

Product description

Colour	Weight (mg)	Size (mm)	Bulk density (g/l)	Packaging	Approved for direct food contact
Black	2.0	2.0 – 3.5	108.0 – 132.0	Bag	No

Physical properties

	Test method	140g/l	150g/l
Compressive strength			
25% strain (kPa)	ISO 844	1,150	1,280
50% strain (kPa)	5mm/min	1,600	1,800
75% strain (kPa)		4,500	5,300
Compression set			
25% strain – 22 hours – 23°C (%)	ISO 1856 (Method C) Stabilising 24h	10.5	10.5
Burn rate (mm/min)	ISO 3795 12.5mm thick	17	16



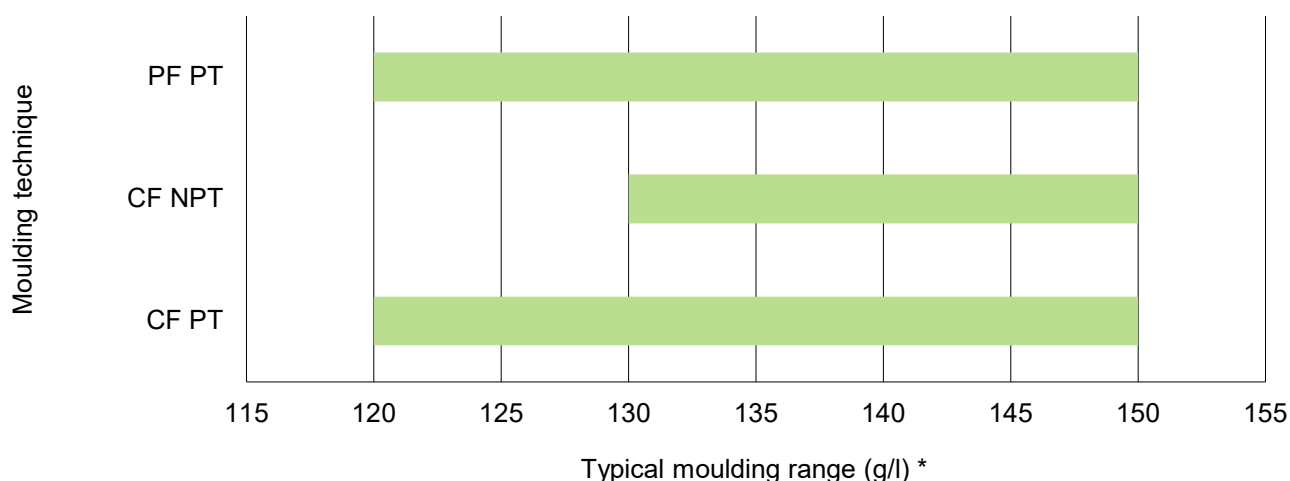
ARPRO 5912 RE contains 30% recycled content from post-consumer EPP waste. The carbon footprint of this grade is 1.74 kg CO₂ eq. / kg ARPRO. This is a 16% reduction in CO₂ emissions compared to ARPRO made from virgin raw materials. The RecyClass certificates and the LCA are available to download from ARPRO.com under Technical / Environment and Health.

Moulding

ARPRO 5912 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.

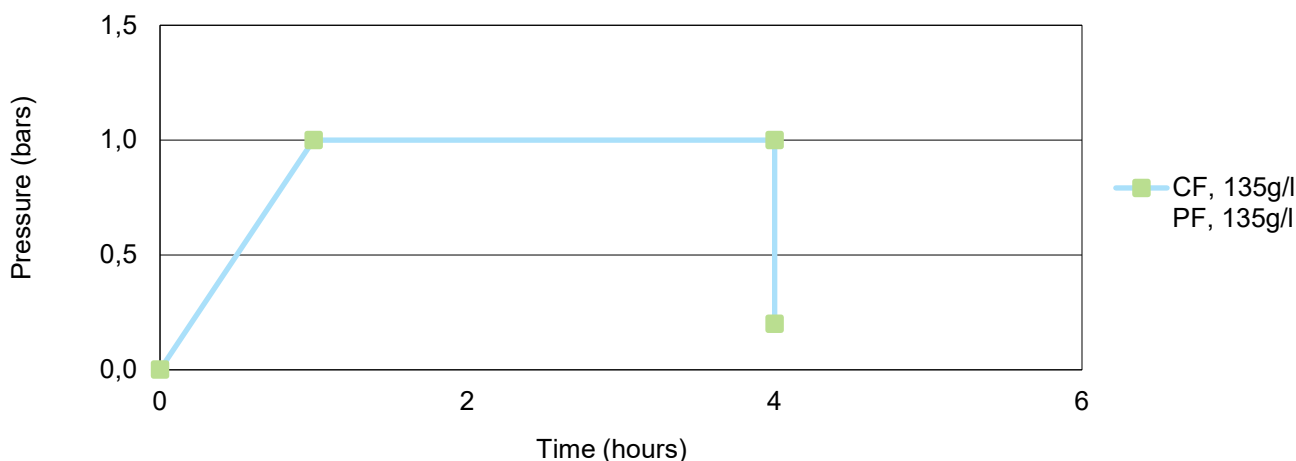
Pressure fill: only applied to Pre-Treated (PT) ARPRO.



* 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 at 1 bar for 3 hours, 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.