ARPRO

5253

Product description

Colour	Weight (mg)	Size (mm)	Bulk density (g/l)	Packaging	Food approved
Black	1.0	2.0 – 3.5	49.0 – 57.0	Bulk	Yes

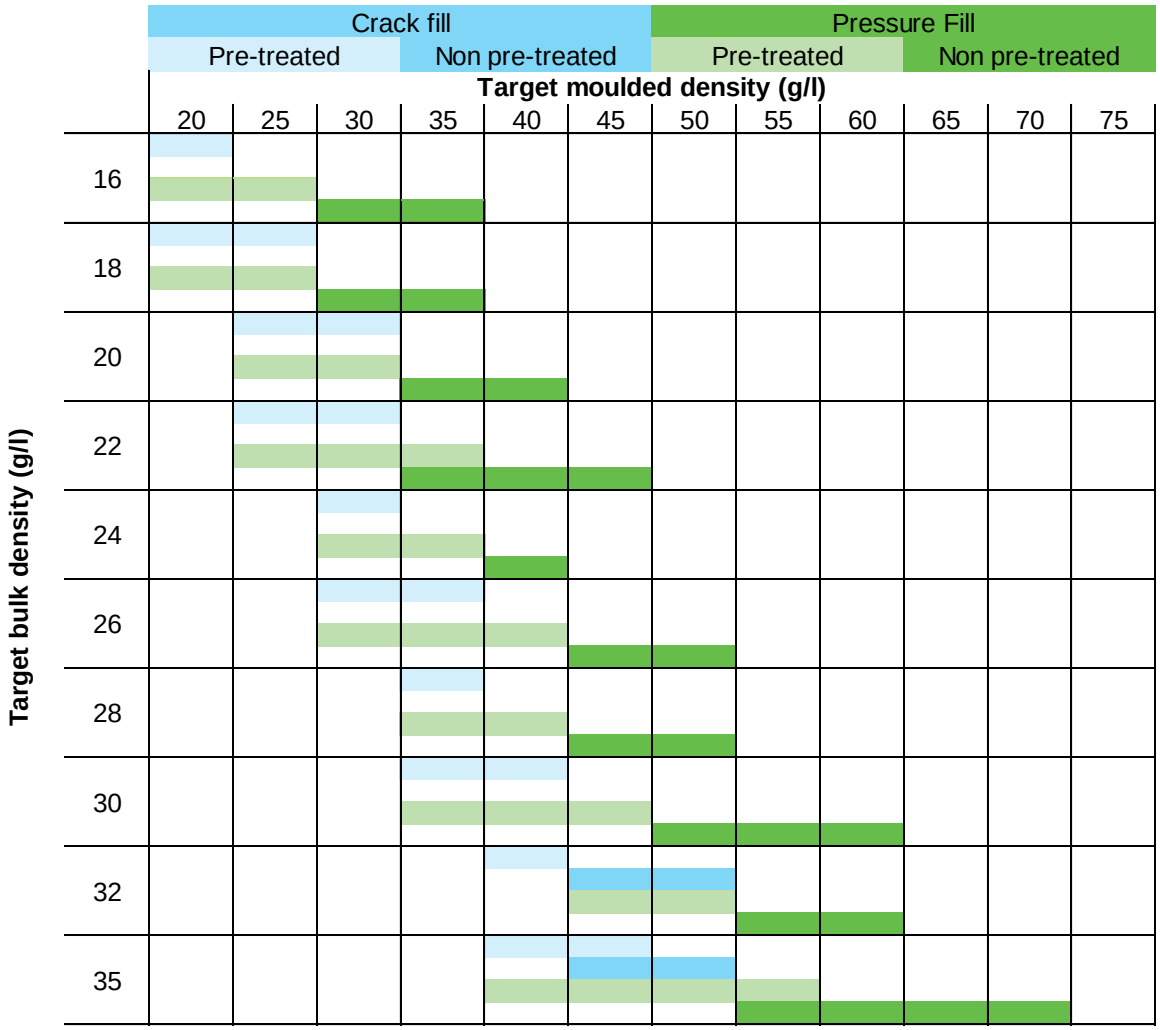
Physical properties

	Test method	20g/l	30g/l	40g/l	50g/l	60g/l	70g/l
Compressive strength 25% strain (kPa) 50% strain (kPa) 75% strain (kPa)	ISO 844 5mm/min	 80 150 370	 150 220 460	 210 300 600	 275 370 800	 340 475 1,000	 425 580 1,250
Tensile strength (kPa) Tensile elongation (%)	ISO 1798	340 32	490 30	640 28	785 26	930 25	1,070 23
Compression set 25% strain – 22 hours – 23°C (%)	ISO 1856 (Method C) Stabilising 24h	12.5	12.0	11.5	11.5	11.5	11.0
Burn rate (mm/min)	ISO 3795 12.5mm thick	115	80	60	50	40	35

ARPRO 5253 is for on-site expansion between 16g/l and 42g/l.

Moulding

ARPRO 5253 requires on-site expansion prior to moulding. The table below illustrates the bulk density range achievable through on-site expansion and the respective moulding process required to then achieve the target moulded density. For direct moulding of 5253 without expansion, please contact the ARPRO technical team for support.



Pre-treatment
Pre-treatment recommendations are available in the respective ARPRO black grade sheets at ARPRO.com.

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.
For moulded densities above 50g/l, post-treatment is not required. Stabilisation to ambient conditions for 4 hours before dimensional quality testing is recommended.

Shrinkage
Typical values range from 1.8% to 3.5%. 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.