

# ARPRO® 5150

## Expanded Polypropylene

**Product:** ARPRO® 5150 is a black coloured bead with a bulk density of 48 g/l to 54 g/l.

**Applications:** Grade typically used for energy absorbing parts: crash pads, bumper cores. Moulded density is typically between 55 g/l and 75 g/l.

**Typical Physical Properties:** For mouldable density range

Tested density	Standard	55 g/l	75 g/l
Compressive strength 25% compression 50% compression 75% compression	ISO 844 5mm/min	300 kPa 420 kPa 880 kPa	450 kPa 610 kPa 1420 kPa
Tensile strength Tensile elongation	ISO 1798	720 kPa 18 %	910 kPa 15 %
Compression set 25% strain – 22 hrs – 23°C	ISO 1856 C Stabilising 24hrs	11.5 %	11.5 %
Stress-strain characteristics “Stauchhärte”	ISO 3386 40%; 4 <sup>th</sup> cycle	150 kPa	170 kPa
Burning rate	ISO 3795 12.5 mm thick	40 mm/min	30 mm/min

Further information is available at [www.jsp.com](http://www.jsp.com) and on request.

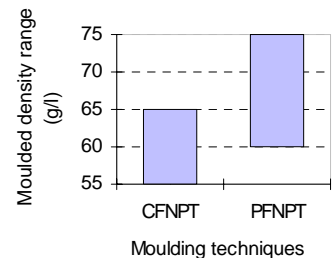
### Processing:

Steam Chest Moulding is the typical method used to produce parts.

ARPRO® 5150 can be moulded using crack fill (CF) and pressure fill (PF) process. No pre-pressurisation is required.

**Post-treatment:** No post-treatment is required. Stabilisation at ambient conditions for 4 hours is recommended before dimensional quality testing.

**Shrinkage:** Typical values are between 1.8% and 2.2%. Increasing the moulded density tends to reduce shrinkage.



The geometry and the process (CF or PF) have an influence on moulded density and shrinkage of the part. We recommend undertaking trials to determine the precise moulded density and shrinkage.