

# Product News

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## BD950MO – PP block copolymer for caps with consistent high performance

BD950MO is a stiff, impact resistant polypropylene heterophasic copolymer designed for caps used for water and carbonated soft drinks. BD950MO can be processed by both compression moulding and injection moulding. The producer benefits from several properties of this grade produced with Borealis Nucleation Technology - including outstanding dimensional consistency of pigmented caps.

### Gearing innovation to Caps and Closures market needs

Borealis has a long history of commitment to serving its customers in the caps and closures market. Our customer driven approach to innovation, together with our polymer design capabilities and technologies, such as Borealis Nucleation Technology (BNT), enable us to offer timely, value-creating products that meet the evolving needs of our caps and closures customers.

### BD950MO: Key features and benefits

- Cap dimensions independent of pigment choice (see figure 1)
- Productivity improvement through reduced cycle time (high crystallisation temperature)
- Excellent stiffness/impact balance
- Among the best in class in terms of stress whitening
- Best tamper-band cutting performance

### Borealis Nucleation Technology

BNT is a Borealis proprietary technology providing highly nucleated polypropylenes with excellent dimensional consistency, regardless of colour pigments used, and considerable potential for cycle time reduction and lightweighting



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## BD950MO: consistent cap dimensions independent of pigment choice

In this market, product differentiation by cap colour is very important. With PP closures especially, colour pigments can significantly alter cap dimensions. BD950MO eliminates this problem, however, as it is produced using Borealis Nucleation Technology, where material shrinkage is independent of the pigment used.

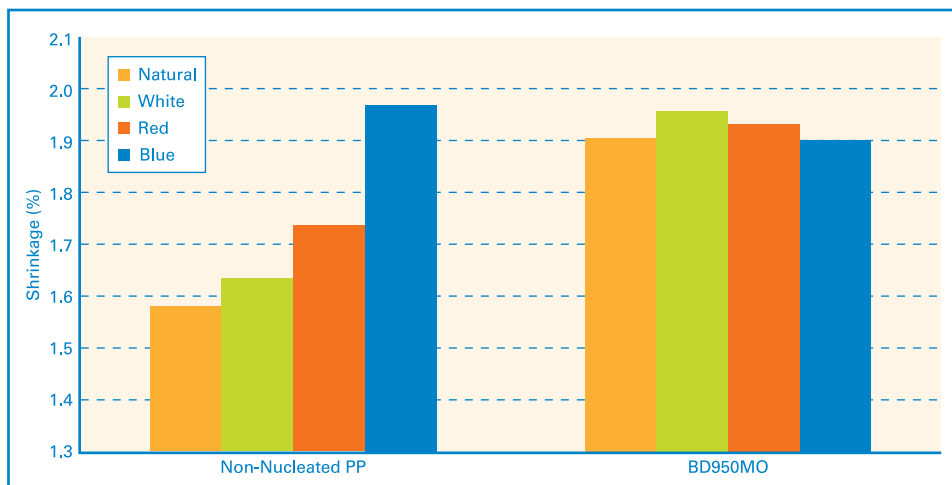


Figure 1: BD950MO - Dimensional consistency in all colours

Physical Property	Typical Value	Unit	Test Method
Density	905	kg/m <sup>3</sup>	ISO 1183
Melt Flow Rate (230°C/2.16 kg)	7	g/10 min	ISO 1133
Tensile Stress at Yield (50 mm/min)	27	MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min)	4.5	%	ISO 527-2
Tensile Modulus (1 mm/min)	1,500	MPa	ISO 527-2
Charpy Impact Strength, notched (+23°C)	8.5	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Impact Strength, notched (-20°C)	4.5	kJ/m <sup>2</sup>	ISO 179/1eA
Hardness, Rockwell	89	R-scale	ISO 2039-2
Heat Deflection Temperature (0.45 N/mm <sup>2</sup> )	110	°C	ISO 75-2

Instrumented Falling Weight	Typical Value	Unit	Test Method
Total Penetration Energy (0°C)	20	J	ISO 6603-2
Total Penetration Energy (-20°C)	15	J	ISO 6603-2

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centres and service centres work with customers in more than 170 countries to provide materials that make an essential contribution to society and sustainable development. We are committed to the principles of Responsible Care® and to leading the way in 'Shaping the Future with Plastics'™.

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