

## SABIC® PP 412MN40

### PP block copolymer for Injection moulding

#### Description:

A multi-purpose grade with very good flow properties, high stiffness and good impact strength. The material has a very low tendency for warpage and is suited for the production of thin wall packaging articles. Cycle times can be very short. It is formulated with a combined processing and antistatic additive package. This grade is widely applied in thin wall technical injection moulded articles and thin-walled containers, in particular where dimensional stability is important.

#### Health, Safety and Food Contact regulations:

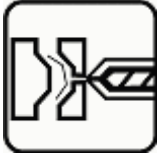
Material Safety Data Sheets (MSDS) and Product Safety declarations are available on our Internet site <http://www.SABIC-europe.com>

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical/ medical applications.

#### Typical values

Revision 20100603

Properties	Unit (Si)	Values	Test methods
<b>Polymer properties</b>			
<b>Melt flow rate (MFR)</b> at 230 °C and 2.16 kg	g/10 min	<b>37</b>	ISO 1133
<b>Density</b>	kg/m <sup>3</sup>	<b>905</b>	ISO 1183
<b>Mechanical properties</b>			
<b>Tensile test</b>			ISO 527
stress at yield	MPa	<b>26</b>	
stress at break	MPa	<b>20</b>	
strain at break	%	<b>400</b>	
<b>Flexural test</b>			ASTM D 790
Flexural modulus	MPa	<b>1550</b>	
<b>Izod impact notched</b>			ISO 180/4A
at 23 °C	kJ/m <sup>2</sup>	<b>6.0</b>	
at 0 °C	kJ/m <sup>2</sup>	<b>4.0</b>	
at -20 °C	kJ/m <sup>2</sup>	<b>3.0</b>	
<b>Charpy impact notched</b>			ISO 179
at 23 °C	kJ/m <sup>2</sup>	<b>4.5</b>	
at 0 °C	kJ/m <sup>2</sup>	<b>3.5</b>	
at -20 °C	kJ/m <sup>2</sup>	<b>3.0</b>	
<b>Hardness Shore D</b>	-	<b>67</b>	ISO 868
<b>Thermal properties</b>			
<b>Heat deflection temperature</b>			
at 1.80 MPa (HDT/A)	°C	<b>53</b>	ISO 75/A
at 0.45 MPa (HDT/B)	°C	<b>89</b>	ISO 75/B
<b>Vicat softening temperature</b>			
at 10 N (VST/A)	°C	<b>147</b>	ISO 306/A
at 50 N (VST/B)	°C	<b>74</b>	ISO 306/B



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**Quality:**

SABIC Europe is fully certified in accordance with the internationally accepted quality standard ISO9001.

**Storage and handling:**

Avoid prolonged storage in open sunlight, high temperatures (<50 °C) and /or high humidity as this could well speed up alteration and consequently loss of quality of the material and /or its packaging. Keep material completely dry for good processing.

**Disclaimer.** The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

SABIC Europe as referred to herein means any legal entity belonging to the SABIC Europe group of companies.