

SABIC® PP RA12MN40

PP RANDOM COPOLYMER

DESCRIPTION

SABIC® PP RA12MN40 is a random copolymer medium ethylene modified, clarified and anti-static. It is typically used for injection moulding applications. Special characteristics are high stiffness, good transparency and high gloss. Typical applications are in housewares and thin walled packaging.

TYPICAL PROPERTY VALUES

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---------------------------------------------------|----------------|--------|--------------|
| POLYMER PROPERTIES | | | |
| Melt Flow Rate (MFR) | | | |
| at 230 °C and 2.16 kg | 40 | dg/min | ISO 1133 |
| Density | 905 | kg/m³ | ASTM D1505 |
| FORMULATION | | | |
| Anti static agent | ☑ | - | - |
| Clarified | ☑ | - | - |
| MECHANICAL PROPERTIES | | | |
| Tensile test | | | |
| stress at yield ⁽¹⁾ | 27 | MPa | ISO 527-2 1A |
| strain at yield | 13 | % | ISO 527-2 1A |
| tensile modulus ⁽²⁾ | 1000 | MPa | ISO 527-2 1A |
| Izod impact notched | | | |
| at 23 °C | 4.0 | kJ/m² | ISO 180/1A |
| at 0 °C | 2.0 | kJ/m² | ISO 180/1A |
| Charpy Impact Strength Notched | | | |
| at 0 °C | 2.0 | kJ/m² | ISO 179/1eA |
| at 23 °C | 5.5 | kJ/m² | ISO 179/1eA |
| Hardness Shore D | 62 | - | ISO 868 |
| THERMAL PROPERTIES | | | |
| Heat deflection temperature ⁽³⁾ | | | |
| at 1.80 MPa (HDT/A) | 50 | °C | ISO 75 |
| at 0.45 MPa (HDT/B) | 75 | °C | ISO 75 |
| Vicat Softening Temperature ⁽⁴⁾ | | | |
| at 50 N (VST/B) | 68 | °C | ISO 306 |
| at 10 N (VST/A) | 126 | °C | ISO 306 |

(1) Speed of testing: 50 mm/min

(2) Speed of testing: 1 mm/min

(3) Flat wise (testbar 80*10*4mm)

(4) Temperature rate: 120°C/h

