

SABIC® PP 642NH-66408

POLYPROPYLENE RANDOM CO-POLYMER FOR PIPE

DESCRIPTION

SABIC® PP 642NH-66408 is a high molecular weight, low melt flow rate polypropylene random copolymer (PP-R) green coloured and specially designed for transport of hot and cold drinking water. This grade is highly heat stabilized and specially formulated for extraction resistance with improved throughput & gloss. SABIC®PP 642NH-66408 is pre-color compounded version of SABIC®PP 651H PPR resin (Exova – MRS classification 8 MPa). SABIC®PP 642NH-66408 is a designated pipe grade.

TYPICAL APPLICATIONS

SABIC®PP 642NH-66408 is a designated pipe grade.

TYPICAL PROPERTY VALUES

Revision 20230511

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Flexural Modulus ⁽¹⁾	1040	MPa	ISO 178
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 230 °C and 2.16 kg	0.3	g/10 min	ISO 1133
Density	900	kg/m ³	ASTM D1505
Filler content ⁽²⁾	0.5	%	SABIC method
Mould shrinkage			
24 hours after injection moulding ⁽²⁾	2.0	%	SABIC method
MECHANICAL PROPERTIES			
Tensile test			
Tensile modulus	1000	MPa	ISO 527/1A
tensile strength	28	MPa	ISO 527/1A
stress at break	18	MPa	ISO 527/1A
strain at break	70	MPa	ISO 527/1A
Izod impact notched			
at 23 °C ⁽¹⁾	26	kJ/m ²	ISO 180/1A
at 0 °C	3.5	kJ/m ²	ISO 180/1A
at -20 °C	2.5	kJ/m ²	ISO 180/1A
THERMAL PROPERTIES			
Heat deflection temperature			
HDT A (at 1.8 MPa)	49	°C	ISO 75
HDT B (at 0.45 MPa)	84	°C	ISO 75
Coeff. of linear thermal expansion			
CLTE -30 °C to 80 °C	126	µm/mK	ASTM D696

(1) Injection molded sample ISO527-1A.

(2) Injection molded plaque 65x65x3.2 mm



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