



SABIC[®] VESTOLEN A RELY 5923R 10000 BLACK

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC[®] Vestolen A RELY 5923R 10000 is a grade which has a high density and a bimodal distribution of the molecular mass. Due to its profile of properties this material is typically used for gas and drinking water piping. This material meets (inter)national standards for use in gas, drinking water and waste water piping. MRS class ISO 12162 MPa = 10.0 (PE 100).

This product is not intended for and must not be used in any pharmaceutical/medical applications.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Colour	Black	-	-
RAL number	9004	-	-
Melt Flow Rate			
at 190 °C and 5 kg	0.2	dg/min	ISO 1133
Carbon black content	2.25	%	ISO 6964
Density	959	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile test ^{(1) (2)}			
stress at yield	24	MPa	ISO 527-2
strain at yield	9	%	ISO 527-2
tensile modulus	1100	MPa	ISO 527-2
Charpy Impact Strength Notched			
at 23 °C	26	kJ/m ²	ISO 179/1eA
at -30 °C	10	kJ/m ²	ISO 179/1eA
Hardness Shore D	62	-	ISO 868
MRS classification	10	MPa	ISO 12162
OIT 210 °C	>20	min	ISO 11357-6
THERMAL PROPERTIES			
Heat deflection temperature ⁽³⁾			
at 0.45 MPa (HDT/B)	45	°C	ISO 75-2
Vicat Softening Temperature			
at 10 N (VST/A)	72	°C	ISO 306
DSC test			
melting point	124 – 128	°C	DIN 53765

(1) Test specimen according to ISO 527-2 type 1BA, thickness 2 mm

(2) Speed of testing: 50 mm/min

(3) Conditioning of test specimen: temp. 23 °C, relative humidity 50 %, 24 hours