

SABIC[®] VESTOLEN A BI5822

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC[®] Vestolen A BI5822 is a bimodal HDPE that combines high ESCR and stiffness with good impact resistance. It is typically used for blow molding of consumer packaging up to 5 l. This grade is typically used for packaging the majority of detergents, cleaners, shampoos and cosmetics.

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			
Melt Flow Rate			
at 190 °C and 5 kg	1	dg/min	ISO 1133
at 190 °C and 21.6 kg	22	dg/min	ISO 1133
Density ⁽¹⁾	958	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile test ^{(2) (3)}			
stress at yield	28	MPa	ISO 527-2
stress at break	34	MPa	ISO 527-2
strain at break	1000	%	ISO 527-2
tensile modulus	1250	MPa	ISO 527-2
Izod impact notched			
at 23 °C	10	kJ/m ²	ISO 180/A
at -30 °C	7	kJ/m ²	ISO 180/A
Hardness Shore D	63	-	ISO 868
ESCR (10% Igepal CO-630), F50	350	h	ASTM D1693B
THERMAL PROPERTIES			
Heat deflection temperature ⁽⁴⁾			
at 0.45 MPa (HDT/B)	75	°C	ISO 75-2
Vicat Softening Temperature			
at 10 N (VST/A)	129	°C	ISO 306
DSC test			
melting point	135	°C	ISO 11357-3
enthalpy change	200	J/g	ISO 11357-3

(1) Compression moulding of test specimen according to ISO 1872-2

(2) Speed of testing: 50 mm/min

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

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