

SABIC® HDPE A4046

HIGH DENSITY POLYETHYLENE

DESCRIPTION

SABIC® HDPE A4046 is a medium density HDPE and is typically used for the production of PE-Xb compounds. The additive package has been optimized for the silane grafting process.

The typical application of these is the manufacture of PEX pipes for hot and cold water and central heating.

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 2.16 kg	3.5	dg/min	ISO 1133
Density	946	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile test ^{(1) (2)}			
stress at yield	22	MPa	ISO 527-2
stress at break	31	MPa	ISO 527-2
strain at break	200	%	ISO 527-2
tensile modulus	800	MPa	ISO 527-2
THERMAL PROPERTIES			
Heat deflection temperature			
at 0.45 MPa (HDT/B)	73	°C	ISO 75-2
Vicat Softening Temperature ^{(3) (4)}			
at 10 N (VST/A)	121	°C	ISO 306
DSC test			
melting point	130	°C	DIN 53765
enthalpy change	186	J/g	DIN 53765