

## SABIC® LDPE 2102TX00

### Low density polyethylene for Wire & Cable extrusion

#### Description

SABIC® LDPE 2102TX00 is a Low Density Polyethylene natural resin designed for the production of Medium/High Voltage power cable insulation using the direct peroxide addition.

SABIC® LDPE 2102TX00 is a non-additivated and non-stabilized LDPE. It exhibits excellent cleanliness and consistent purity.

Sufficient antioxidant should be added to meet specific ageing requirements.

#### Application

- Peroxide cross-linkable insulation for Medium/High Voltage power cable.

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical/ medical applications.

#### Typical data.

Properties	Units SI	Values	Test methods
<b>Polymer properties</b>			
<b>Melt flow rate (MFR)</b> at 190 °C and 2.16 kg	dg/min	<b>1.9</b>	ISO 1133
<b>Density</b>	kg/m <sup>3</sup>	<b>921</b>	ISO 1183
<b>Mechanical properties</b>			
<b>Tensile test</b>			ISO 527-2
stress at yield	MPa	<b>9</b>	
stress at break	MPa	<b>13</b>	
strain at break	%	<b>850</b>	
tensile modulus	MPa	<b>175</b>	
<b>Modulus of elasticity</b>	MPa	<b>250</b>	SABIC method
<b>Hardness Shore D</b>	-	<b>45</b>	ISO 868
<b>Thermal properties</b>			
<b>Vicat softening temperature</b> at 10 N (VST/A)	°C	<b>89</b>	ISO 306
<b>DSC test</b>			
melting point	°C	<b>108</b>	DIN 53765
crystallization temperature	°C	<b>97</b>	SABIC method
<b>Electrical properties</b>			
<b>Volume resistivity</b>	Ohm.cm	<b>8.5E15</b>	ASTM D 257
<b>Dissipation factor at 60 Hz</b>	-	<b>5.0E-4</b>	ASTM D 150
<b>Dielectric constant at 60 Hz</b>	-	<b>2.2</b>	ASTM D 150
<b>Dielectric strength at 2000 V/sec</b>	V/μm	<b>&gt;30</b>	ASTM D 149