

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.

Revision 20121112

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

SABIC® LDPE 2102TX00

Low density polyethylene for Wire & Cable extrusion

General information. SABIC Europe produces low density polyethylene for wire & cable market by SABIC's proprietary high pressure Clean Tubular Reactor (CTR®) technology, which ensures grades with high cleanliness level. SABIC® LDPE for wire and cable market is non-stabilized LDPE, designed for Medium/High Voltage insulation via crosslinking.

Health, Safety and Food Contact regulations. Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, available on the Internet (www.SABIC-europe.com). Additional specific information can be requested via your local Sales Office.

Quality. SABIC Europe is fully certified in accordance with the internationally accepted quality standard ISO 9001. It is SABIC Europe's policy to supply materials that meet customers specifications and needs and to keep up its reputation as a pre-eminent, reliable supplier of e.g. polyethylenes.

Storage and handling. Polyethylenes resins (in pelletised or powder form) should be stored in such a way that it prevents exposure to direct sunlight and/or heat, as this may lead to quality deterioration. The storage location should also be dry, dust free and the ambient temperature should not exceed 50 °C. Not complying with these precautionary measures can lead to a degradation of the product which can result in colour changes, bad smell and inadequate product performance. It is also advisable to process polyethylene resins (in pelletised or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

Environment and recycling. The environmental aspects of any packaging material do not only imply waste issues but have to be considered in relation with the use of natural resources, the preservations of foodstuffs, etc. SABIC Europe considers polyethylene to be an environmentally efficient packaging material. Its low specific energy consumption and insignificant emissions to air and water designate polyethylene as the ecological alternative in comparison with the traditional packaging materials. Recycling of packaging materials is supported by SABIC Europe whenever ecological and social benefits are achieved and where a social infrastructure for selective collecting and sorting of packaging is fostered. Whenever 'thermal' recycling of packaging (i.e. incineration with energy recovery) is carried out, polyethylene -with its fairly simple molecular structure and low amount of additives- is considered to be a trouble-free fuel.

Disclaimer. The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

SABIC Europe as referred to herein means any legal entity belonging to the SABIC Europe group of companies.