

SABIC® LLDPE 324CN

Linear low density polyethylene for Wire & Cable extrusion

Description

SABIC® LLDPE 324CN is a Linear Low Density Polyethylene natural resin designed for wire and cable applications.

SABIC® LLDPE 324CN contains low level of antioxidant and does not contain any antiblock and/or slip agents.

Sufficient antioxidant and Cu-inhibitor should be added to meet specific ageing requirements. For jacketing applications, addition of Carbon Black or UV stabilizer is required.

Application

- One-step or two-step Silane cross-linkable insulation for Low Voltage power cable.
- One-step or two-step Silane cross-linkable insulation for Arial Bundel Cable.
- The grade is also suitable for Telecommunication and Low Voltage power cable jacketing.

Mechanical and electrical properties.

Test specimens were prepared by compression moulding according to ASTM D 4703.

Typical data.

Revision 20080424

Properties	Units SI	Values	Test methods
Polymer properties			
Melt flow rate (MFR) at 190 °C and 2.16 kg	g/10 min	3.6	ASTM D 1238
Density	kg/m ³	924	ASTM D 1505
DSC melting point	°C	122	SABIC method
Mechanical properties			
Tensile test			ASTM D 638
stress at yield	MPa	14	
strain at yield	%	14	
stress at break	MPa	10	
strain at break	%	540	
Flexural test			ASTM D 790
Secant modulus at 1% elongation	MPa	339	
Hardness Shore D	-	51	ASTM D 2240
Electrical properties			
Volume resistivity	Ohm.cm	6.0E15	ASTM D 257
Dissipation factor at 60 Hz	-	5.0E-4	ASTM D 150
Dielectric constant at 60 Hz	-	2.19	ASTM D 150
Dielectric strength at 500 V/sec	V/μm	55	ASTM D 149

All information supplied by or on behalf of the SABIC Europe companies in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and believed reliable, but the relevant SABIC Europe company assumes no liability whatsoever in respect of application, processing or use made of the afore-mentioned information or products, or any consequence thereof. The user undertakes all liability in respect of the application, processing or use of the afore-mentioned information or product, whose quality and other properties he shall verify, or any consequence thereof. No liability whatsoever shall attach to any of the SABIC Europe companies for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of the application, processing or use of the afore-mentioned information or products by the user.

SABIC® LLDPE 324CN

Linear low density polyethylene for Wire & Cable extrusion

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 9001-2000. 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.