



BPD2070

Product Technical Information

BPD2070 is an unstabilised low density thermoplastic polyethylene. It is designed for use in medium voltage power cable one step silane crosslink insulation. BPD2070 shows good electrical properties and good cleanliness. Provided suitable antioxidant is added by the user and proper processing conditions are adopted, BPD2070 can be used as the base resin for a thermoplastic high voltage insulation compound. Adequate filtering might be necessary for this high voltage application.

Specification

BPD2070 meets the following material specification:

- ISO 1872/1: PE, KGN, 18-D003
- ASTM D 1248: Type I, Class A, Cat 5

Packaging

BPD2070 is sold in pellet form and is available in the following packages: 1.1 ton holbins or bulk tankers.

Processing Data

An antioxidant has to be introduced in BPD2070 by the user in order to fulfil the required ageing tests. The required extrusion melt temperature is approximately 230°C but will depend on extrusion speed and cooling conditions

Properties:

Properties	Test Method	Value	Units
Physical			
Melt flow rate	ISO 1133 Cond. D	0.25	g/10min
Conventional density conditioning ISO 1872/1	ISO 1183 Method D	923	kg/m ³
Tensile strength @ break	IEC 811-1-1	16	MPa
Elongation @ break	IEC 811-1-1	600	%
Electrical			
Dielectric constant @ 50 Hz	ASTM D 150-2.2	2.3	-
Dielectric strength, short time	ASTM D 149	>22	kV/mm
DC volume resistivity @23°C	ASTM D 257	>10 ¹⁶	Ω cm
Dissipation factor @ 50 Hz	ASTM D 150	300	μrad

* Data should not be used for specification work