

Technical Data Sheet

Lupolen GX 4087

Low Density Polyethylene

Product Description

Lupolen GX 4087 is a non-stabilized low density polyethylene (LDPE), designed for use in medium voltage power cables using the Direct Peroxide Injection process. To assure high standards of cleanliness a dedicated production procedure is maintained and the product is tested by using online measurements. Sufficient antioxidant should be added to meet specific ageing requirements.

The product is delivered in pellet form and meets the requirements of ASTM D 1248, Type I, Class A, Category 3, Grade E5.

This grade is not intended for medical and pharmaceutical applications.

Application	Wire & Cable
Market	Compounding; Industrial, Building & Construction; Wire & Cable
Attribute	Foamable; Good Electrical Properties; Good Flexibility; Good Processability; High Purity; Low Gel

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	1.5	g/10 min	ISO 1133-1
Density	0.919	g/cm ³	ISO 1183-1
Mechanical			
Tensile Modulus	200	MPa	ISO 527-1, -2
Tensile Stress at Break	15	MPa	ISO 527-1, -2
Tensile Stress at Yield	9	MPa	ISO 527-1, -2
Tensile Strain at Break	500	%	ISO 527-1, -2
Tensile Strain at Yield	15	%	ISO 527-1, -2
Hardness			
Shore Hardness, (Shore D)	45		ISO 868
Thermal			
Vicat Softening Temperature, (A/50)	88	°C	ISO 306
Peak Melting Point	108	°C	ISO 11357-3
Electrical			
Volume Resistivity	>10E16	ohm*cm	IEC 93
Dielectric Constant	2,3		IEC 250
Dissipation Factor	0,0002		IEC 250
Dielectric Strength	>22	kV/mm	IEC 60243-1