

Low Voltage Power Cable Insulation Compounds (Base Resin)

Property	Density ¹⁾	MFR ^{1), 2)}	Tensile Strength ³⁾	Elongation at Break ³⁾	Relative permittivity ⁴⁾ (1MHz)	Dielectric dissipation Factor ⁴⁾ (1MHz)	Volume Resistivity ⁵⁾	Resin Type	Application	Description
Method	ISO 1183-2	ISO 1133-1	ISO 37	ISO 37	IEC 60250	IEC 60250	IEC 62631-3-1	-		
unit	kg/m ³	g/10min	MPa	%	-	-	Ω·cm	-		
Grade										
NUC-9060	0.921	1.3	15 [13]	680 [460]	2.28	0.0001	> 10 ¹⁷	HP-LDPE	Base resin for XLPE	Good extrudability over a wide range of temperatures, less contamination, and suitable for crosslinked compound resins.
NUCG-5130	0.922	0.6	24 [18]	900 [620]	2.29	0.0001	> 10 ¹⁷	LLDPE	Base resin for Silane Crosslinking	Good extrudability over a wide temperature range, and suitable base resin for cross-linked compounds. Can be used stably at 120°C
NUCG-7101	0.920	0.7	15 [17]	680 [730]	2.27	0.0001	> 10 ¹⁷	LLDPE		Good extrudability over a wide temperature range, and suitable base resin for cross-linked compounds. Glanular type.
NUCG-9301	0.920	0.7	17 [16]	700 [650]	2.28	0.0001	> 10 ¹⁷	LLDPE		Good extrudability over a wide temperature range, and suitable base resin for cross-linked compounds.

1) Values measured without peroxide.

2) Measured at 190°C, 21.18N

3) Molding condition : compression 2mm sheet, Test pieces : ISO 37 type 1A, Test speed : 500mm/min

4) The value at solid, Test method: Liquid replacement, 23°C

5) Compression 0.5mm sheet, 1000V, 1min, 23°C

Values in [] show data on compression molded sheets after crosslinking with addition of 1.6% of vinyl silane.

Note •The values are dependent upon using the testing method as indicated and are offered herein as a guide in the use of compound.