

4205EC-35

EXTRA-CLEAN XLPE COMPOUND FOR 35KV AND BELOW POWER CABLE

Main Properties & Typical Values

Test Items	Unit	Test Method	Standard	Typical value
Tensile strength	MPa	GB/T1040.3	≥13.5	25.9
Elongation at break	%	GB/T1040.3	≥350	537
Heat ageing properties (Test temperature 135℃, 168hr)				
Maximum tensile strength change	%	GB/T8815	±20	10
Maximum elongation at break change	%		±20	0
Heat elongation (200±3)℃ x 15min x 0.2MPa)				
Maximum elongation change under load	%	GB/T2951	≤80	46
Maximum permanent elongation change after cooled	%		≤5	0
Impact brittle temp. (-76℃)	Failure			
Impact brittle	no.	GB/T5470	≤15/30	pass
Dielectric Strength	MV/m	GB/T1408.1	≥25	39
Dielectric loss factor 50Hz, 20℃	--	GB/T1409	≤5×10 ⁻⁴	2×10 ⁻⁴
Dielectric constant 50Hz, 20℃	--	GB/T1409	≤2.35	2.10
Volume resistance (20℃)	Ω·m	GB/T1410	≥1×10 ¹⁴	2.4×10 ¹⁴
Gel content	%	JB/T10437	≥80	86
Moisture content	μg/g	Q/GHPX6	≤200	100

Note: All typical values were tested by press moulding sample under the condition of 180±2 ℃, 15min, and pressure over 15MPa, then cooling to room temperature

Referring to the JB/T10437-2004 standard, the company standard specified that in every 1kg sample of grade 4205EC-35, the impurities with diameter 0.175 ~ 0.250mm must not be more than 5 pieces, the impurities with diameter more than 0.250mm must be zero.

We have strict control over the raw material of product grade 4205EC-35, which has been produced under purified environment. The typical value of product impurity content is:

Particle diameter (mm)	No. of particle
0.175-0.25	2
>0.25	0