

Test Report Data Sheet

Material Type: Expandable HDPE

AGIPC Material Testing Lab			
High Density Polyethylene (Natural) NI1034			
Item	Result	Test Method	Unit
<i>Melt Flow Index</i>	0.5±0.1	ASTM D1238	g/10min
<i>Ultimate Tensile Strength</i>	15±3	ASTM D638	g/cm³
<i>Elongation At Break</i>	700±50	ASTM D638	N/mm²
<i>Retention of mechanical properties after aging 48hours at 100 °C</i>	95±3	ASTM D638	%
<i>Brittleness Temperature</i>	-50±10	ASTM D746	°C
<i>OIT</i>	40±5	ASTM D3895	min
<i>Thermal Stress Cracking at 100°C</i>	>96	ASTM D2951	hours
<i>Dielectric Constant at 1 MHZ</i>	2±0.1	ASTM D150	---
<i>Dispersion Factor at 1 MHZ</i>	0.0003±1	ASTM D150	---
<i>Dielectric Strength</i>	30±5	ASTM D140	Kv/mm
<i>DC Volume Resistivity at 23°C</i>	10¹⁵	ASTM D257	Ohm.cm

Application

- Production of foam or foam-skin telephone single insulation for air-core or Jelly-filled copper cable