

## **RAW MATERIAL SPECIFICATION FOR PE (FOAM) COMPOUND**

### **1. Scope**

This specification covers the requirement of PE compound used for insulation first layer of telephones single conductor (foam layer) used in jelly filled telephone cables.

### **2. Quality requirement**

The material shall be supplied in uniform granules free from contamination, fines and other defects. The material should have good process ability for very high extrusion line speed with excellent mechanical properties, a high resistance to copper catalysis, thermal oxidation and excellent resistance to petroleum jelly

The polyethylene compounds shall be confirm to ASTM D 1248 standard

### **3. Materials**

HD Polyethylene cellular for high speed extrusion of telephone core , foam layer in foam / skin application insulation core . The insulation speed at least 1500 m / min .

Property	Unit	Test method	requirement
Type	-	-	<b>H D PE Cellular</b>
Color	-	-	Natural
Density at 23 °C	g / cm <sup>3</sup>	DIN 53479 IEC 811-1-3	> 0.94
Tensile strength (min )	Not expended	N / mm <sup>2</sup>	23
	Expended 35-40 %		13
Elongation ( min)	Not expended	%	600
	Expended 35-40 %		500
Dielectric constant at 1 MHZ	-	IEC 250	≤2.33
Dissipation Factor at 1 MHz	-	IEC 250	≤ 5x 10 <sup>-4</sup>
Petroleum Jelly Absorption	%	IEC 811-4-2	≤10

### **4. Packing**

The material shall be properly packed in moisture proof bags in a manner that avoids problem in transportation & storage. The material shall be marked for proper identification and each bag weights 25 kg

### **5. Test certificate**

The supplier shall submit test report for each lot/batch of material

### **6. Criteria of acceptance/ rejection**

The material shall be subjected to inspection and the test shall be carried out for acceptance/ rejection on part or whole lot.

### **7. Sample**

Each tenderer should provide 25 kg as a sample of material provided to reach us before closing date for making tests.

Unless his material is already successfully tested.

The samples shall be the basis for accepting or rejecting the offer.