

RAW MATERIAL SPECIFICATION FOR POLYETHYLENE COMPOUND

1. **Scope**

This specification covers the requirement of natural LDPE low-density polyethylene compound used for insulation of quad cables and TV antenna .

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 extrusion lines with excellent mechanical properties, a high resistance to copper catalysis, and thermal oxidation

The polyethylene compound shall be confirming to ASTM D 1248 standard:

Properties	Unit	Test method	Requirements
Type			LDPE
Color			Natural
Form of material			Granule
Density	g/cm ³	IEC 811-1-3 DIN 53479	0.925±0.005
Hardness	Shore D	DIN 53505	50±2
Melt flow index	g/ 10 min	IEC 811-4-1	≤ 0.4
Tensile strength	N/mm ²	IEC 811-1-1	≥12.5
Elongation	%	IEC 811-1-1	≥300
Brittleness temperature	°C	ISO 974	≤ -60
Vicat softening point	°C	ISO 306	90
Dielectric constant at 1 MHz		IEC 250	≤ 2.35
Dispersion factor At 1 MHz		IEC 250	≤ 10 ⁻⁴
Volume resistivity @ 20°C min.	Ω.cm	IEC 60502-1	≥10 ¹⁶
Test voltage	Kv	IEC 60502-1	6,5

3. **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 weight 25 kg.

And about one ton packet on wooden pallet and then wrapped for easy transportation

4. **Test certificate**

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

5. **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.

6. **Sample**

25 kg as a sample of material for each type 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.