

RAW MATERIAL SPECIFICATION FOR BLACK MDPE

1. Scope

This specification covers the requirement of black medium-density polyethylene compounds used for jacketing communication cables.

2. Quality requirement

The material shall be supplied in uniform granules free from contamination, fines and other defects.

The material should possess good process ability for extrusion line with excellent stress crack resistance and mechanical properties, and low temperature performance in combination with good extrudability

The polyethylene compounds shall be confirm to ASTM D 1248 standard and as the following specification:

Properties	Unit	Test method	Requirements
Type			MDPE
Color			Black
Form of material			Granule
Density*	g/cm ³	IEC 811-1-3 DIN 53479	>0.925 ≤0.940
Hardness @ 3 sec	Shore D	DIN 53505	57±3
Melt flow index (190 °C 2.16Kg)	g/ 10 min	IEC 811-4-1	≤ 1
Tensile strength (50mm/min)	N/mm ²	IEC 811-1-1	≥20
Elongation (50mm/min)	%	IEC 811-1-1	≥500
Brittleness temperature	°C	ISO 974	≤ -76
Antioxidant content	%		≥ 0.1
Carbon black content	%	IEC 811-4 -1	2.5 ± 0.5

* Density value for natural material without carbon black

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 weights 25 kg

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

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

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