



**MEDIUM WALL NON-TRACKING TUBE (NTT) SPECIFICATION SHEET**

	Characteristics	Requirement	Frequency	Control Method
	Product Control			
1	Visual	Good and free from defects	100% - daily	Internal
2	Dimensions	As per Dimension Table	5 samples - daily	Internal
3	Concentricity	min 60%	3 samples - daily	Internal
4	Longitudinal Change	±10%	3 samples - daily	Internal
5	Tensile strength	min 8 MPa (N/mm <sup>2</sup> )	5 samples-routine	ASTM D 638
6	Ultimate elongation	min 200%	5 samples-routine	ASTM D 638
7	Heat Shock (250°C, 30 mins)	no splitting, cracking, dripping or flowing	Qualification	EATS 09-13
8	Dielectric strength	min 10 kV/mm	Qualification	IEC 60243
9	Resistance to tracking	Class 1A, 3.5 kV for 6 hours	Qualification	IEC 60587
10	Tensile strength after thermal ageing (135°C, 168 hrs)	min 6 MPa (N/mm <sup>2</sup> )	Qualification	EATS 09-13
11	Ultimate elongation after thermal ageing (135°C, 168 hrs)	min 150%	Qualification	EATS 09-13
12	Volume resistivity	min 10 <sup>14</sup> ohm.cm	Qualification	IEC 60093
13	Secant modulus	max 170 MPa	Qualification	EATS 09-13
14	Water absorption	max 1%	Qualification	ISO - 62
		<b>Frequency</b>	<b>Agency</b>	
	<b>Daily</b>	- Routine test during production	In-house	
	<b>Qualification</b>	- Whichever is earlier of the following	External or In-house	
		a. At the time of introduction of new product		
		b. After a significant change in formulation		
		c. Every three years		
	<b>Compounding</b>	- For compounding of every batch of material.	In-house	