



MV MOLDED PARTS SPECIFICATION SHEET

	Characteristics	Requirement	Frequency	Control Method
	Product Control			
1	Visual	Good and free from defects	100% - daily	Internal
2	Dimensions	As per Engineering Drawing	5 samples - daily	Internal
3	Tensile strength	min 7 MPa (N/mm ²)	5 samples - daily	ASTM D 638
4	Ultimate elongation	min 300%	5 samples - daily	ASTM D 638
5	Hardness	min 32 shore D	Daily	ASTM D 2240
6	Tensile strength after thermal ageing (135 ^o C, 168 hrs)	min 6 MPa (N/mm ²)	Qualification	EATS 09-13
7	Ultimate elongation after thermal ageing (135 ^o C, 168 hrs)	min 250%	Qualification	EATS 09-13
8	Heat Shock (250 ^o C, 30 mins.)	No splitting, cracking, dripping or flowing	Qualification	EATS 09-13
9	Water absorption	max 1%	Qualification	ISO - 62
10	Dielectric strength	min 12 kV/mm	Qualification	IEC 60243
11	Dielectric constant	5 max.	Qualification	ASTM D 150
12	Volume resistivity	min 10 ¹⁴ ohm.cm	Qualification	IEC 60093
13	Resistance to tracking	No failure by tracking after	Qualification	ASTM D 2303
		1 hour at 2.5 kV		
		1 hour at 2.75 kV		
		1 hour at 3.00 kV and 20 mins at 3.25 kV		
14	Flame retardance	Non burning	Qualification	ESI 09-13
Raw Material Control				
15	Tensile strength	min 7 MPa (N/mm ²)	Compounding	ASTM D 638
16	Ultimate elongation	min 300%	Compounding	ASTM D 638
17	Hardness	min 32 shore D	Compounding	ASTM D 2240
		Frequency	Agency	
		Daily	- Routine test during production	In-house
		Qualification	- 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	
		Compounding	- For compounding of every batch of material.	In-house