

Laboratory	MRF R & D – Corporate Technical, MRF Road, Tiruvottiyur, Chennai, Tamil Nadu		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	21.07.2015
Certificate Number	T-1082	Valid Until	20.07.2017
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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I. RUBBER & SYNTHETIC RUBBER				
1.	Synthetic Latex VP Latex	Total solids content	ASTM D1417-10	30 % to 50 % / 0.1
		Ph		7.0 to 13 / 0.1
		Viscosity		20 MPa to 60 MPa / 0.1
2.	Rubber compound and Product	Compositional Analysis	ASTM D 6370-99 (2014)	
		Organics %		30 % to 80 % / 0.1
		Carbon black %		10 % to 60 % / 0.1
		Ash %		0.1 % to 50 % / 0.1
II. INDUSTRIAL & FINE CHEMICALS				
1.	Carbon Black	Heat loss	ASTM D1509-95 (2012)	0.1 % to 2.5 % / 0.1
		Iodine Adsorption Number	ASTM D1510-13	30 g/kg to 200 g/kg / 0.5
		Oil Absorption Number	ASTM D 2414-14	30 cc/100g to 150 cc/100g / 0.1
2.	Inorganic Chemicals Silica	Volatile Content	ASTM D 6738-11	0 to 10 % / 0.5
		pH value	ASTM D 6739-11	4.0 to 9.0 / 0.1
3.	Accelerators (Thiazole Sulphenamide Gunaidine)	Insoluble	ASTM D 4934 (02) 2012	0.0 to 0.50 % / 0.02
		Melting point	ASTM D 1519-95 (RA 2014)	40 °C to 200 °C / 0.5
		Ash	ASTM D 4574-06-12	0.1 % to 0.50 % / 0.02

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4.	Antioxidants			
a.	p-Phenylene diamine (6 PPD)	Melting point	ASTM D 1519-95 (R 2014)	40 °C to 50 °C / 0.5
	n-(1,3 dimethyl butyl) n' phenyl p-phenylene diamine (6PPD)	Ash	ASTM D 4574-06-12	0.1 % to 0.50 % / 0.02
b.	Trimethyl Dihydro Quinoline (TMQ)	Softening pt	ASTM D 6090– 12	80 °C to 100 °C / 0.1
		Ash	ASTM D 4574-06 (2012)	0.1 % to 0.30 % / 0.02
c.	Sulfur	Ash	ASTM D 4574-06 (2012)	0.01 % to 0.20 % / 0.01
		Insoluble	ASTM D 4578 (06)-2012	60 % to 85 % / 0.1
III.	PLASTICS AND RESINS			
1.	Phenol Formaldehyde Resin / Resorcinol Formaldehyde Resin	Softening point	ASTM D 6090-12	75 °C to 150 °C / 0.1
IV.	LUBRICANTS			
I.	Aromatic oil Paraffinic oil	Aniline Point	ASTM D 611-12	30 °C to 110 °C / 0.1
		Viscosity	ASTM D 2983-09	15 MPa to 40 MPa / 0.1
2.	MC Wax	First drop Melting point	ASTM D 127-08 (2015)	50 °C to 75 °C / 0.1

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