

**Laboratory** Technical Consultancy Division, Rubber Research Institute of India,  
Rubber Board P.O., Ministry of Commerce & Industry, Govt. of India,  
Kottayam, Kerala

**Accreditation Standard** ISO/IEC 17025: 2005

**Certificate Number** TC-6390

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**Validity** 23.11.2018 to 22.11.2020

Last Amended on 26.11.2018

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
<b><u>MECHANICAL TESTING</u></b>				
<b>I.</b>	<b>RUBBER AND RUBBER PRODUCTS</b>			
1.	Rubber and Rubber Products	Optimum cure time	ASTM D 5289	Time 2 min to 40 min @ Temp.135°C to 170°C
		a) ts1	ASTM D 5289	Time 0.2 min to 10 min @ Temp.135°C to 170°C
		b) ts2	ASTM D 5289	Time 0.3 min to 12 min @ Temp.135°C to 170°C
		c) MH	ASTM D 5289	Torque 5dNm to 30dNm@ Temp.135°C to 170 °C
		d) ML	ASTM D 5289	Torque 1 dNm to10 dNm@ Temp.135°C to 170°C
		Mooney viscosity	ASTM D1646, Method A	20 Mooney units to 100 Mooney units @ Temp. 100°C to 125°C
		Scorch time	ASTM D1646,Method C	Time 1 min to 15 min @ Temp. 120°C to 138 °C
		Density	IS 3400 (Part 9)	0.3 Mg/m <sup>3</sup> to 2.0 Mg/m <sup>3</sup>
		Hardness, Shore A	ASTM D 2240	20 Shore A to 90 Shore A
		Tensile strength (Dry rubber products)	ASTM D412 IS 3400 (Part 1) ISO 37	3 MPa to 30 MPa
		300% Modulus (Dry rubber products)	ASTM D412 IS 3400 (Part 1) ISO 37	2 MPa to 20MPa
		Elongation at break (Dry rubber products)	ASTM D412 IS 3400 (Part 1) ISO 37	100% to 800%

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Tear strength (5kN)	IS 3400 (Part 17)	20 N/mm to 150 N/mm
		Compression set (25%)	IS 3400(Part 10)	Upto 80%
		Force at break (100N)	IS 3400 (Part 1) ISO 37/BS EN 455 2(A <sub>2</sub> )	5 N to 90 N
		Dimensions of gloves a. Length b. Thickness	IS 13422/ ASTM D 3577 IS 15354 ASTM D 3578-05	240 mm to 300mm 0.08 mm to 0.25mm
		Tensile strength (Latex products)	ASTM D412 IS 3400 (Part 1) ISO 37	3 MPa to 35MPa
		Elongation at break (Latex products)	ASTM D412 IS 3400 (Part 1) ISO 37/ BS EN 455 2(A <sub>2</sub> )	100 % to 1300 %
		Modulus, 300% (Latex products)	ASTM D412 IS 3400 (Part 1) ISO 37/ISO 10282	0.2 MPa to 15 MPa
		Modulus, 500% (Latex products)	ASTM D412 IS 3400 (Part 1) ISO 37/ BS EN 455 2(A <sub>2</sub> )	0.4 MPa to 20 MPa