

Laboratory                      Plastics Testing Centre, Central Institute of Plastics Engineering & Technology, Guindy, Chennai, Tamil Nadu

Accreditation Standard      ISO/IEC 17025: 2005

Certificate Number          TC-7096

Page 1 of 8

Validity                          27.03.2018 to 26.03.2020

Last Amended on 01.03.2019

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
-----	----------------------------	-------------------------	---	--

**BIOLOGICAL TESTING**

I.	<b>DRUGS AND PHARMACEUTICALS</b>			
1.	<b>Copper –T Tubal Ring, Syringe &amp; Gloves</b>	Sterility Test	IP 2018, Volume No. 1 Page No.59-66	Qualitative

Laboratory **Plastics Testing Centre, Central Institute of Plastics Engineering & Technology, Guindy, Chennai, Tamil Nadu**

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

Certificate Number **TC-7096**

Page 2 of 8

Validity **27.03.2018 to 26.03.2020**

Last Amended on **01.03.2019**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
<b><u>CHEMICAL TESTING</u></b>				
<b>I.</b>	<b>PLASTIC &amp; RESINS</b>			
<b>1.</b>	<b>Plastic Materials and Products.</b>	Carbon black content in olefin Plastics	ASTM D 1603 IS 2530	0 to 40%
		Carbon Black Dispersion	IS 2530	Qualitative
		Determination of Moisture Content	ISO 585	0 to 3 %
		Water Absorption of Plastics	ASTM D 570	0 to 5 %
		Environmental Stress Cracking Resistance of Ethylene Plastics	ASTM D 1693	Qualitative
<b>2.</b>	<b>Condom</b>	Determination of Lubricant Quantity	Schedule R of Drug & Cosmetic Act 1940	250 mg to 600 mg

Laboratory **Plastics Testing Centre, Central Institute of Plastics Engineering & Technology, Guindy, Chennai, Tamil Nadu**

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

Certificate Number **TC-7096**

Page 3 of 8

Validity **27.03.2018 to 26.03.2020**

Last Amended on **01.03.2019**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
<b><u>ELECTRICAL LAB</u></b>				
<b>I.</b>	<b>PLASTIC MATERIALS PRODUCTS</b>			
<b>1.</b>	<b>Plastic Materials Products</b>	Volume Resistivity	ASTM D 257	10 <sup>6</sup> to 10 <sup>14</sup> OhmCm
		Surface Resistivity	ASTM D 257	10 <sup>6</sup> to 10 <sup>14</sup> Ohm
		Determination of Arc Resistance	ASTM D 495	1 Sec to 420 Sec
		Determination of Dielectric Strength	ASTM D 149	1 kV to 60 kV
		Comparative Tracking Index	ASTM D 3638	150 V to 600 V
<b>II.</b>	<b>HOUSE HOLD APPLIANCES</b>			
<b>1.</b>	<b>Electric Table Fan</b>	Air Delivery	IS 555 (Clause : 10.3)	14 m <sup>3</sup> /min. to 75 m <sup>3</sup> /min
		Flash Test	IS 555 (Cl. 10.6) IS 996 (Clause 13.1)	0.1 kV to 5 kV
		Starting	IS 555 (Clause 10.7) IS 4250 (Clause 16.0) IS:302 -1	Visual
		Fan Speed Input Power	IS:996 (Clause 12.7) IS 555 (Clause 10.7) IS 4250 (Clause 9.0) IS 555 (Clause 10.8)	100 rpm to 3000 rpm 1 W to 100 W (50 Hz)
<b>2.</b>	<b>Electric Table Fan, Food mixer &amp; Single Phase Ac Induction motor</b>	Temperature Rise	IS 555 (Cl.10.4) IS 4250 (Cl. 11.0)	30°C to 100 °C
		High Voltage	IS 302 – 1 IS 996 (Cl. 12.2)	0.1 kV to 5 kV
		Insulation Resistance	IS 555 (Clause 10.6.5)	1 GΩ to 500 GΩ @ 500 V
		Protection against electric shock	IS 555 (Clause : 10.9) IS 555 (Clause : 10.11)	Standard Test Finger

Laboratory **Plastics Testing Centre, Central Institute of Plastics Engineering & Technology, Guindy, Chennai, Tamil Nadu**

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

Certificate Number **TC-7096**

Page 4 of 8

Validity **27.03.2018 to 26.03.2020**

Last Amended on **01.03.2019**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		(Finger Probe Test)  Moisture Resistance	IS 302 – 1 IS 4250 (Clause 8.0) IS 555 (Clause 10.12) IS 4250 (Clause 15.0) IS 302 -1 IS 996 (Clause 13.2)	40° C, 90% RH
3.	<b>Electric Table Fan, Food mixer</b>	Creepage distances and clearance  Input Power	IS 555 (Clause :10.16) IS 4250 (Clause 29.0) IS 302 – 1 IS 4250 (Clause 10.0) IS 302 - 1	0.5 mm to 10 mm  1 W to 1000 W
4.	<b>Food mixer</b>	Supply connecting and external cables and cards  Screws and connections  Operational Test  Test for controls  Strength of Assembly	IS 4250 (Clause 25.0) IS 302 – 1  IS 4250 (Clause 28.0) IS 302 – 1  IS 4250 (Clause 34.0)  IS 4250 (Clause 36.0)  IS 4250 (Clause 37.0)	1 N to 100 N  Visual  200 micron to 710 micron sieves  Visual  Visual

Laboratory **Plastics Testing Centre, Central Institute of Plastics Engineering & Technology, Guindy, Chennai, Tamil Nadu**

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

Certificate Number **TC-7096**

Page 5 of 8

Validity **27.03.2018 to 26.03.2020**

Last Amended on **01.03.2019**

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 LAB</u></b>				
<b>I.</b>	<b>POLYMERIC MATERIALS AND PRODUCTS</b>			
<b>1.</b>	<b>Plastic &amp; Rubber</b>	Tensile Properties		
		Tensile strength	ASTM D 638	0.5 MPa to 8000 MPa
		Tensile Modulus	ASTM D 882	0.5 MPa to 8000 MPa
		Elongation	ISO 527	1 % to 1000%
		Compressive strength of Rigid plastics	ASTM D 695	0 to 8000 MPa
		Flexural Strength	ASTM D 790 ISO 178	0.5 MPa to to 8000 MPa
		Izod Impact Strength	ASTM D 256 ISO 180	0.5 kJ/m <sup>2</sup> to 175 kJ/m <sup>2</sup>
		Charpy Impact Strength	ASTM D 6110 ISO 179	0.5 kJ/m <sup>2</sup> to 175 kJ/m <sup>2</sup>
		Impact resistance of UPVC Pipes at 0° C by falling weight	IS 4985	Qualitative
		Shore Hardness	ASTM D 2240	0 to 100 (A) 0 to 100 (D)
		Specific gravity	ASTM D 792	0.2 to 10.0
		Failure of pipe under internal pressure	IS 12235 (Part 8) IS 4984	0 to 70 kg/cm <sup>2</sup>
		Heat Deflection Temperature	ASTM D 648	30°C to 300 °C
		Vicat Softening Point	ASTM D 1525	30°C to 300 °C
		Flow rate of thermoplastics by extrusion Plastometer	ASTM D 1238 IS 2530	0.15 to 100 g/10min
		Reversion test for pipe	IS 12235(Pt.5) IS 12786 IS 4984	0 to 20%

Laboratory

Plastics Testing Centre, Central Institute of Plastics Engineering & Technology, Guindy, Chennai, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7096

Page 6 of 8

Validity 27.03.2018 to 26.03.2020

Last Amended on 01.03.2019

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Brittleness Temperature	ASTM D 746	(-)70 C to 20°C
		Measurement of Wall thickness of pipe, Film & Sheet	IS 4984 IS 12235(Pt.2) IS 12786 IS 12818	0.01 mm to 25 mm
		Rockwell Hardness	ASTM D 785	Load: 60,100,150 Scale: R,L,M
		Abrasion Resistance	ASTM D 4060 ASTM D 1044	0 to 10000 mg
		Mould Shrinkage	ASTM D 955	0 to 5%
		Weathering of Polymers	ASTM G 155 ISO 4982	Qualitative
		Colour Measurements	ASTM D 2244 CIE 76	L: 0.0 to 100% a: (-) 80% to 80% b: (-) 80% to 80% E:0.1 % to 50 %
		Limiting Oxygen Index	ASTM D 2863 IS 13501	1% to 100%
2.	Copper – T 380 A	Weight of the copper Copper collar position Measurement of copper collar outer diameter Determination of copper collar pull force Measurement of length of Tie Determination of strength of Tie Determination of pouch burst strength	Ministry of Health and family welfare specification as per IS 7439	0.1 g to 210 g 1.0 mm to 6 mm 1 mm to 3 mm  0.1 N to 100 N  0.1 mm to 1000 mm  1 N to 100 N  0.5 mm to 160 mm Hg

Battal Singh  
Convenor

N. Venkateswaran  
Program Manager



**Laboratory**                      **Plastics Testing Centre, Central Institute of Plastics Engineering & Technology, Guindy, Chennai, Tamil Nadu**

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

**Certificate Number**        **TC-7096**

**Page 8 of 8**

**Validity**                        **27.03.2018 to 26.03.2020**

**Last Amended on 01.03.2019**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Maximum Average rate of heat emission (MAHRE)	ISO 5660-1 & EN 45545-2	0.1 KW/m <sup>2</sup> to 500KW/m <sup>2</sup>
		Weathering of plastics	ASTM G 154	Qualitative
			ASTM D 5208	Qualitative

---

**Battal Singh**  
Convenor

---

**N. Venkateswaran**  
Program Manager