



Ami Polymer Pvt Ltd.

Plot No. 66-D/E, Govt. Industrial Estate, Masat, Silvassa, 396230, DNH

Internal Test Report

Title: - Imapure[®] EPL Tube (Low Hysteresis Platinum cured Silicone Rubber) Peristaltic Pump Analysis report.

Physical Test Report: -

Testing Report					
Sr. No.	Test	Standard	Unit	Imapure [®] EPL(Low-Hysteresis silicone rubber) Tube	Imapure [®] Platinum Cured silicone Tube
1	Specific Gravity	ASTM D 297	Gm/CC	1.13	1.16
2	Hardness	ASTM D 2240	Shore A	60	61
3	Tensile strength	ASTM D 412	Kg/Cm2	81.36	95.6
4	Elongation at break	ASTM D 412	%	536.2	620.8
5	Tear Strength	ASTM D 624 Die C	Kg/cm	20.18	40.36
6	Rebound Resilience	ISO 4662	%	65	53
7	Compression Set	ASTM D 395 B	%	10.5	15.2

Peristaltic Pump Life Analysis: -

The Tubing Sample of Size ID 6.4 MM ID X OD 9.6 OD was steam sterilized at a temperature of 121±5°C for a period of 30±5 minutes. A four roller pump head was utilized operating at 600 RPM at room temperature of 27±2°C water was used as a transfer liquid and the testing performed with Zero PSI back pressure.

Parameter	Imapure [®] EPL (Low Hysteresis silicone rubber) Tube	Imapure [®] Platinum Cured silicone Tube
Size	ID 6.4X OD 9.6	ID 6.4 X OD 9.6
RPM	600	600
Media	Water	Water
Initial Flow Rate	330	342
Final flow rate	252	310
Crack	144Hrs	42 Hours

Due to its specific formulation, low hysteresis silicone rubber tube provides exceptional continuous pumping duration.

As Demonstrated in below Graph, Imapure[®]EPL (Low Hysteresis Platinum cured Silicone) Tubing provides over 3X pump life compared to other platinum cured silicone rubber tubing

