



**Customer Service Cell**  
**Biomedical Technology Wing**  
**Sree Chitra Tirunal Institute for Medical Sciences & Technology**  
(An Institute of National Importance under Govt. of India)  
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**TEST CHARGES (PHYSICOCHEMICAL TESTS)**  
**(w.e.f 1<sup>st</sup> October 2022)**

Note: GST will be charged as applicable

Sl.No.	Name of the test	Test Method/ Standard followed	Lab	Test Charges - External - Industry	Test Charges - External - Academic	Test Charges - TIMed/TT Licensee
1	X-Ray Diffraction Spectrum	Approved protocol	Division of Bioceramics	1900	1500	1300
2	Microhardness testing			1000	800	700
3	ICP-OES (2 elements)			1200	1000	800
a	ICP-OES, For each extra element			400	350	300
4	Mechanical Testing	Approved protocol based on ASTM	Division of Polymeric Medical Devices			
a	Tensile Test of dumbbells and rectangular strips WITHOUT extensometer			1000	800	700
b	Tensile Test of dumbbells and rectangular strips WITH extensometer			1200	1000	800

  
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c	Tensile Testing of sheets /plaques/films (WITHOUT extensometer & requiring sample cutting to dumbbells /rectangular strips )		<b>Division of Polymeric Medical Devices</b>	1200	1000	800
d	Tensile Testing of sheets /plaques/films (WITH extensometer & requiring sample cutting to dumbbells /rectangular strips )	Approved protocol based on ASTM		1300	1000	900
e	Tensile testing of biological tissues			1300	1000	900
f	Tensile test (Devices)			1000	800	700
g	Compression test ( Cylindrical samples, preferred diameter 2mm and height 4 to 6 mm)			1000	800	700
h	Compression test ( Devices)			1000	800	700
5	Impact Testing (IZOD& CHARPY)	ISO 179, ISO 180		800	700	600
6	Dynamic Mechanical Analysis	Approved protocol				
a	Analysis of samples from ambient to desired high temperature			1400	1100	1000
b	Analysis of samples from – 150 <sup>0</sup> C to desired high temperature			4200	3400	2900
7	Micro injection moulding	Approved protocol		3100	2500	2100
8	Mechanical Testing using UTM	Approved protocol as per ASTM		<b>Division of Dental Products</b>	1000	800
9	Thermocycler(For a batch of less than 500gm for first 2 hours		8800		7000	6200
10	Micro CT Testing	Approved protocol	7800		6200	5500
a	Supplementary analysis		300		250	200
11	Dynamic Light Scattering		400		350	300
12	Zeta Potential		600		500	400




13	Thermal Analysis		Central Analytical Facility			
a	DSC-Differential scanning calorimetry (scan rate 10 °C/min or above)			1500	1200	1100
b	DSC- Differential scanning calorimetry (scan rate 5 °C/min or below)	ASTM E 1356 - 03		1800	1400	1300
c	DTA- Differential thermal analysis(Up to 600°C)			1800	1400	1300
d	DTA-Differential thermal analysis(Up to 1200°C)	Approved protocol		2800	2200	2000
e	TGA-Thermogravimetric analysis (Up to 1200°C)			2800	2200	2000
f	TGA-Thermogravimetric analysis (Up to 600°C)	ASTM 1131-03		1800	1400	1300
14	GPC/HPLC/GC					
a	Gel Permeation Chromatography: GPC	Approved protocol based on ASTM D 5296		1700	1400	1200
b	High-performance Liquid Chromatography HPLC : purity assay/single sample	Approved protocol		600	500	400
c	HPLC: Quantification(standards & sample)			1700	1400	1200
d	HPLC: Estimation of residual Ethylene glycol (EG) and ethylene chlorohydrin			1700	1400	1200
e	Gas chromatography GC (Residual Ethylene oxide_)	Approved protocol based on ANSI		3500	2800	2500
f	Gas chromatography: purity assay/single sample (Qualitative)			2000	1600	1400
g	Gas chromatography: Quantification(standards & sample)		3500	2800	2500	

  
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15	FTIR Spectroscopy (ATR/ KBr)	Approved protocol based on ASTM	Central Analytical Facility	1100	900	800
16	UV-Visible Absorption analysis					
a	UV-Visible Absorption analysis(Qualitative)	Approved protocol		400	350	300
b	UV-Visible absorption analysis (Quantitative)			800	700	600
17	Solution Viscosity of Biopolymers			400	350	300
18	Fluorescence Microscopy Imaging			500	400	300
19	Luminescent Image Analysis			300	250	200
20	Mechanical testing of tissues (Texture Analysis)			800	600	550
21	Micro Raman Spectroscopy			800	700	600
22	Confocal Raman Microscopy			1700	1300	1200
23	Quartz crystal nanobalance experiments			6800	5400	4800
24	Fluorescence Intensity and Absorbance Measurements - Microplate			200	150	130
25	Fluorescence and Absorbance Scan - Microplate			200	150	130
26	Fluorescence spectroscopic analysis			400	350	300
27	Environmental Ageing Experiments			1100	900	800
28	Conformability of Primary Wound Dressing			700	600	500

  
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29	Tensile strength and elongation at break of PPE		<b>Central Analytical Facility</b>	700	600	500
30	Tear strength of PPE ( Trapezoidal method)			700	600	500
31	Tear strength of fabrics (Single rip procedure)			700	600	500
32	Synthetic blood penetration test of PPE			3800	3000	2700
33	Water vapour transmission rate of PPE and fabrics			1000	800	800
34	Tensile strength and elongation at break of medical gloves			1300	1000	900
35	Injectability and syringeability of gels/liquids			600	500	400
36	Transmission Electron Microscopy		<b>Transmission Electron Microscopy (TEM)</b>			
a	Transmission Electron Microscopy (TEM) Analysis) - Biological	Approved protocol		8400	6700	5900
b	Transmission Electron Microscopy (TEM) Analysis) - Inorganic			4100	3300	2900
37	SEM Analysis	Approved protocol	<b>Scanning Electron Microscopy (SEM)</b>			
a	Scanning Electron Microscopy (SEM) Analysis (Without coating)			2100	1700	1500
b	Scanning Electron Microscopy Analysis (with gold coating)			2100	1700	1500
c	Scanning Electron Microscopy Analysis – Biological samples			3000	2400	2100

  
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d	Scanning Electron Microscopy Analysis (with critical point drying & gold coating)	Approved protocol	<b>Scanning Electron Microscopy (SEM)</b>	3000	2400	2100
e	Scanning Electron Microscopy - EDS Analysis			3800	3000	2700
f	SEM-EDS Analysis for Biological samples			4500	3600	3200
g	SEM (For more than 3 micrographs to a maximum of 5 - additional charge/ image)			300	250	200
h	SEM-EDS Analysis (For more than 2 image spectra additional charge/image spectra)			300	250	200
38	E SEM Anlysis					
a	E SEM Anlysis (Biological)			6000	4800	4200
b	ESEM analysis ( Non biological)			3300	2600	2300
c	ESEM EDS analysis			3300	2600	2300
39	Confocal microscopy			Approved protocol	<b>Division of Tissue Culture</b>	1500
40	Profilometer		<b>Calibration Cell</b>			
a	Profilometer - line scanning	Manufaturer instruction		2200	1800	1500
b	Profilometer - surface scanning			4400	3500	3100



41	Ethylene Oxide sterilization		<b>Lab for Extracorporeal Devices</b>			
a	Ethylene Oxide sterilization(Partial load)			1500	1200	1100
b	Ethylene Oxide sterilization(Half load)			2500	2000	1800
c	Ethylene Oxide sterilization(Full load)			4500	3600	3200
42	FTIR Spectroscopy		<b>Division of Tissue Engineering &amp; Regenerative Technologies</b>			
a	Data file for each spectrum			1100	900	800
b	Overlay spectra			300	250	200
43	Contact angle measurement			300	250	200
a	Image file		600	500	400	
44	Calo test (AIO lab)		<b>Lab for Artificial Internal Organs</b>			
45	Live animal imaging ( BPI lab)			2000	1600	1400
			<b>Lab for Biophotonics and Imaging</b>			
				3000	2400	2100

Approved by

Head , BMT  
Wing

  
30.9.22

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