

THE SOUTH INDIA TEXTILE RESEARCH ASSOCIATION
CENTRE OF EXCELLENCE FOR MEDICAL TEXTILES

| Test Parameter | International / Indian Standard | Sample Required | Turn Around Time [@] | Testing Charges (Rs. per sample)# |
|---|---|-----------------|-------------------------------|-----------------------------------|
| <u>Physical Parameters</u> | | | | |
| Coveralls for COVID-19 - Specification or Synthetic Blood Penetration Resistance Test | IS 17423 ISO 16603 IS 16546 ASTM F1670 | 1 Coverall | 2 days | 4500 |
| Mass Per Unit Area | ISO 9073-1 | 1 Coverall | 1 day | 180 |
| <u>Biological Parameters</u> | | | | |
| Viral Penetration Resistance Test | ISO 16604 IS 16545 ASTM F 1671 | 1 Coverall | 5 days | 10000 |
| Resistance to Dry Microbial Penetration | ISO 22612 | 1 Coverall | 3 days | 13500 |

GST as applicable (18% at present) for all testing charges quoted in this table and all subsequent tables

@ *Turn around time (TAT) means the time taken for the sample to be tested from the time it is taken inward for testing. TAT may increase during times of sample backlogs.*

Specification – IS 17334 (Package Test)

| Test Parameter | | International / Indian Standard | Sample Required | Turn Around Time | Testing Charges (Rs. per sample)# |
|---|-----------------|---------------------------------|-----------------|------------------|-----------------------------------|
| <u>Physical Parameters</u> | | ISO 18695 | 4 gowns/ drapes | 2 days | 600 |
| Impact penetration (g) | | | | | |
| Hydrostatic resistance (cmwc) | | ISO 811 | | 2 days | 550 |
| Synthetic Blood Penetration Resistance | | IS 16546 / ISO 16603 | | 2 days | 4500 |
| Particle release [log10 (lint count)] | | IS 15891-10 | | 2 days | 3000 |
| Moisture vapour transmission rate | | ISO 11092 | | 2 days | 6000 |
| Tensile strength (dry and wet) (N) | | IS 15891-3 | | 2 days | 490 |
| Bursting strength (dry and wet) (kPa) | | IS 1966 | 2 days | 325 | |
| <u>Biological Parameters</u> | | | 4 gowns/ drapes | | |
| Viral Penetration Test | | IS 16545 / ISO 16604 | | 5 days | 10000 |
| Cleanliness–microbial (CFU/100 cm2) | | IS 11737 | | 20 days | 3750 |
| Resistance to microbial penetration — Dry | | IS 16548 / ISO 22612 | | 3 days | 13500 |
| Cytotoxicity | Direct | IS/ISO 10993-5 | | 15 days | 1600 |
| | In Direct | | | 15 days | 2100 |
| | Test on extract | | | 15 days | 2500 |
| Irritation and skin sensitization | | | | 3 months | 126500 |

Test Parameter - AAMI PB 70 (Package Test)

| Test Parameter | International / Indian Standard | Sample Requirement | Turn Around Time | Testing Charges (Rs. per sample)# |
|--|--|---------------------------|-------------------------|--|
| Water resistance Hydrohead test | AATCC 127 | 1 Sq.Meter / 1 Gown | 2 days | 550 |
| Water Resistance - Impact Penetration Test | AATCC 42 | | 2 days | 600 |
| Synthetic Blood Penetration Test | ASTM F1670 | | 2 days | 4500 |
| Viral penetration test | ASTM F1671 | | 5 days | 10000 |

Test Parameter - EN 13795 (Package Test)

| Test Parameter | International / Indian Standard | Sample Requirement | Turn Around Time | Testing Charges (Rs. per sample)# |
|---|--|---------------------------|-------------------------|--|
| Water resistance Hydrohead test | EN ISO 811 | 3 Sq.Meters / 4 Gown | 2 days | 550 |
| Linting | EN ISO 9073-10 | | 2 days | 3000 |
| Resistance to Microbial Penetration — Dry | EN ISO 22612 | | 3 days | 13500 |
| Cleanliness microbial / Bioburden | EN ISO 11737-1 | | 20 days | 3750 |
| Bursting Strength-Dry | EN ISO 13938-1 | | 2 days | 325 |
| Bursting Strength-Wet | EN ISO 13938-1 | | 2 days | 325 |
| Tensile Strength-Dry | EN 29073-3 | | 2 days | 840 |
| Tensile Strength-Wet | EN 29073-3 | | 2 days | 840 |

Test Parameter – IS 16289 (Package Test)

| Test Parameter | International / Indian Standard | Sample Requirement | Turn Around Time | Testing Charges (Rs. per sample)# |
|---------------------------------|--|---------------------------|-------------------------|--|
| Differential Pressure | IS 16289 Annex C | 10 facemasks | 2 days | 825 |
| Splash Resistance | IS 16289 Annex D | 35 facemasks | 2 days | 4500 |
| Bacterial Filtration Efficiency | IS 16288 | 5 facemasks | 4 days | 4550 |

Note : Not part of the package but available for individual testing is the test for Particulate Filtration Efficiency at 0.3 microns under IS 16289 Annex E testing standard

Test Parameter – ASTM F2100 (Package Test)

| Test Parameter | International / Indian Standard | Sample Requirement | Turn Around Time | Testing Charges (Rs. per sample)# |
|--|--|---------------------------|-------------------------|--|
| Differential Pressure | EN 14683-Annex C | 10 facemasks | 2 days | 825 |
| Splash Resistance | ASTM F1862 | 35 facemasks | 2 days | 4500 |
| Particulate Filtration Efficiency at 0.3 microns | ASTM F2299 | 5 facemasks | 2 days | 7500 |
| Bacterial Filtration Efficiency | ASTM F2101 | 5 facemasks | 4 days | 4550 |
| Flammability | 16 CFR 10 | 5 facemasks | 2 days | 2250 |

Test Parameter – EN 14683 (Package Test)

| Test Parameter | International / Indian Standard | Sample Requirement | Turn Around Time | Testing Charges (Rs. per sample)# |
|---------------------------------|--|---------------------------|-------------------------|--|
| Differential Pressure | EN 14683-Annex C | 10 facemasks | 2 days | 825 |
| Splash Resistance | ASTM F1862 | 35 facemasks | 2 days | 4500 |
| Bacterial Filtration Efficiency | EN 14683-Annex B | 10 facemasks | 4 days | 7500 |

* *Standard not available*

| Test Parameter | International / Indian Standard | Sample Required | Turn Around Time | Testing Charges (Rs. per sample)# |
|---|---|--------------------------|------------------|-----------------------------------|
| Synthetic Blood Penetration Resistance Test | IS 17423 ISO 16603 IS 16546 ASTM F1670 | 75 sq.cm (10 numbers) | 2 days | 5550 |
| Resistance to Dry Microbial Penetration | ISO 22612 | 50 sq.cm (15 numbers) | 3 days | 13500 |

(Package Test)

| Test Parameter | International / Indian Standard | Sample Requirement | Turn Around Time | Testing Charges (Rs. per sample)# |
|--|---------------------------------|--------------------|------------------|-----------------------------------|
| Package Test for Sanitary Napkin (Length, Width, Thickness, Absorbency, Disposability, pH) | IS 5405 | 10 nos | 2days | 1630 |

| Test Parameter | International / Indian Standard | Sample Requirement | Turn Around Time | Testing Charges (Rs. per sample)# |
|---|--|---------------------------|-------------------------|--|
| Liquid strike through time & Wetback | ISO 9073-8 & ISO 9073-14 | 10 nos | 2 days | 1000 |
| Repeated liquid strike through time & wetback | ISO 9073-13 & ISO 9073-14 | 5 nos | 2 days | 1000 |
| Run-off | ISO 9073-11 | 5 nos | 2 days | 550 |
| Overall liquid transport characteristics | AATCC 195 | 5 nos | 2 days | 1100 |
| Free swell capacity | WSP 240.3 | 1 no | 2 days | 550 |
| Centrifuge retention capacity | WSP 241.3 | 1 no | 2 days | 1500 |
| pH of aqueous extract | IS 1390 | 1 no | 2 days | 250 |

| Test Parameter | International / Indian Standard | Sample Requirement | Turn Around Time | Testing Charges (Rs. per sample)# |
|--|---------------------------------|-----------------------|------------------|-----------------------------------|
| Bioburden Testing | ISO 11737 - 1 | 1 (Unopened pack) | 20 days | 3750 |
| Isolation and identification of normal flora <i>S.aureus</i> | IS 5887 Part 2 | 2 nos | 3 days | 600 |
| Invitro cytotoxicity (Direct Method) | ISO 10993 Part 5 | 2 nos (Unopened pack) | 15 days | 1600 |
| Invitro cytotoxicity (In Direct Method) | ISO 10993 Part 5 | 2 nos (Unopened pack) | 15 days | 2100 |
| Skin Irritation | ISO 10993 Part 10 | 20 nos | 2 months | 22000 |
| Skin Irritation (NABL) | ISO 10993 Part 10 | 20 nos | 2 months | 27500 |
| Skin Sensitization | ISO 10993 Part 10 | 20 nos | 3 months | 77000 |
| Skin Sensitization (NABL) | ISO 10993 Part 10 | 20 nos | 3 months | 99000 |
| *Antibacterial Evaluation (Qualitative) | AATCC 147 | 1 nos | 3 days | 1300 |
| *Antibacterial Evaluation (Quantitative) | AATCC 100 & ASTM E2149 | 5 nos | 5 days | 2000 |
| Antibacterial Evaluation | JIS L1902 | 5 nos | 5 days | 2850 |
| **Biodegradability testing | AATCC 30 Part 1 | 15 nos | 16 weeks | 3300 |

* *If the samples is coated with antimicrobial compound*

** *If the sample is claimed as degradable.*