

TRADE COMMISSIONER SERVICE ROME – TEXTILE SPECIFICATIONS FOR GOWN PRODUCTION

Note that different countries may utilize different standards so the cut-off may differ slightly or need unit conversions we can address accordingly with specifications upon receipt.

Types that can be investigated for use:

- Polypropylene
- Polyethylene
- Polyester (even polyester cotton blends)
- spun-bound
- melt blown
- SMS / SMMS
- Film laminate (and combos to above)

High level criteria as per AAMI PB 70 classification Level 1 to 3 the norm starting point that we should have with initial screen . Note the tensile and tear strength at are optimal cut-off that apply to all three levels.

Property	Material type	Test Method	Level 1	Level 2	Level 3
Barrier performance	all	AATCC 42 AATCC 127	≤ 4.5 g NA	≤ 1.0 g ≥ 20cm	≤ 1.0 g ≥ 50cm
Tensile Strength	all	D5034	≥ 30N (≥ 7lbf)	≥ 30N (≥ 7lbf)	≥ 30N (≥ 7lbf)
Tear strength	Woven Nonwoven Films Non woven and film composites	Woven Nonwoven Films Non woven and film composites	≥ 10N (≥ 2.3lbf)	≥ 10N (≥ 2.3lbf)	≥ 10N (≥ 2.3lbf)

Critical is that the seam strength needs to meet a criteria of ≥ 30N (≥ 7lbf) for AAMI level performance.

The level 2 to 3 for the spunbound / Meltblown / SMMS we would need to be in area of 25 gsm and above. For level 1 you can go as low as 18 gsm as we have done. Uniformity of material is key!

spunlace and spunbound only fabrics (no laminate) of 35-50 gsm offer level 1 performance.

For polyester and polypropylene above 30 gsm of polypropylene the polyester could be higher as a starting point even at 50 gsm.