

ICP Medical | Material Description

Spunbond Polypropylene

For basic infection control, this non-woven fabric bonds fibers together to form a single layer that is appropriate only for very minimal fluid exposure.

SMS Material

Strong and breathable, spunbond/ Meltblown/spunbond (SMS) is a multi-layer fabric composed of inner layers of meltblown polypropylene between outer layers of spunbond polypropylene that is ideal for extended wear. Light/ medium weight SMS is appropriate for low amounts of fluid and heavy weight SMS may be appropriate for moderate contact with fluids.

Coated Polypropylene (“Poly-coated”) (PP+PE)

Soft, spunbond polypropylene is coated with a layer of polyethylene (plastic) film.

Polyethylene (Plastic) Film (PE)

A single layer of polyethylene (plastic) film provides protection at an affordable cost.

AAMI Gown Protection Levels

ANSI/AAMI; PB70 Barrier Performance	Test Method	Test Definition		Requirements	Anticipated fluid exposure
AAMI Level 1	Water resistance: Impact penetration AATCC 42”	AATCC 42	Measures the resistance of fabrics to the liquid penetration of water by impact	Water impact ≤ 4.5 g	Minimal fluid levels (some resistance to water spray)
AAMI Level 2	Water resistance: Impact penetration AATCC 43	AATCC 42	Measures the resistance of fabrics to the liquid penetration of water by impact	Spray Impact ≤ 1.0 g	Low fluid levels (resistant to water spray and some resistance to water penetration under constant contact with increasing pressure)
	Water resistance: Hydrostatic pressure AATCC27	AATCC 27	Measures the resistance of fabrics to the liquid penetration of water by impact under constant and increasing hydrostatic pressure	Hydrostatic Pressure ≥ 20 cm	
AAMI Level 3	Water resistance: Impact penetration AATCC 43	AATCC 42	Measures the resistance of fabrics to the liquid penetration of water by impact	Spray Impact ≤ 1.0 g	Moderate fluid levels (resistant to water spray and some resistance to water penetration under constant contact with increasing pressure)
	Water resistance: Hydrostatic pressure AATCC27	AATCC 27	Measures the resistance of fabrics to the liquid penetration of water by impact under constant and increasing hydrostatic pressure	Hydrostatic Pressure ≥ 50 cm	
AAMI Level 4	ASTM F1671, Standard Test Method for Resistance of Materials Used in Protective Clothing to Penetration by Blood-Borne Pathogens Using PHI-X174 Bacteriophage Penetration as a Test System	ASTM F1671	Measures the resistance of materials used in protective clothing to penetration by blood borne pathogens using a surrogate microbe under conditions of continuous liquid contact	Pass	Blood and viral penetration resistance (2psi)

<https://www.cdc.gov/PPEInfo/Standards/Info/ANSI/AAMIPB70Class3>

AAMI PB70: This standard is made up of 2 tests for Levels 1, 2, & 3: ASTM Spray Impact Penetration Test and Hydrostatic Head Test. For Level 4 the standard is made up of 1 test: ASTM1671, Viral Penetration of blood borne pathogens

The Spray Impact Test is performed to determine if the product is protective or nonprotective. The Spray Impact Penetration Test measures the resistance of fabrics to liquid penetration by water spray impact. Results help predict barrier performance of the isolation gown’s critical zones and indicate how well the gown will perform when fluids fall or splash onto it.

The Hydrostatic Pressure Test result indicates the level of protection from 1-3. The Hydrostatic Head Test measures the resistance of fabrics to liquid penetration by water

under constantly increasing hydrostatic pressure. Results help predict barrier performance properties of the isolation gown’s critical zones and indicate how well the gown will perform when fluid pressure is applied to it.

OSHA standard 29 CFR Part 1910.1030(d)(3)(i): Provision. When there is occupational exposure, the employer shall provide, at no cost to the employee, appropriate personal protective equipment such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks and eye protection, and mouthpieces, resuscitation bags, pocket masks, or other ventilation devices. Personal protective equipment will be considered “appropriate” only if it does not permit blood or other potentially infectious materials to pass through to or reach the employee’s work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

FOR MORE INFORMATION:

info.ICPMedical@teamtech.com | 1-800-405-3044 | www.icpmedical.com