

TECHNICAL NOTE

VWR[®]

Basic Protection SMS Frocks

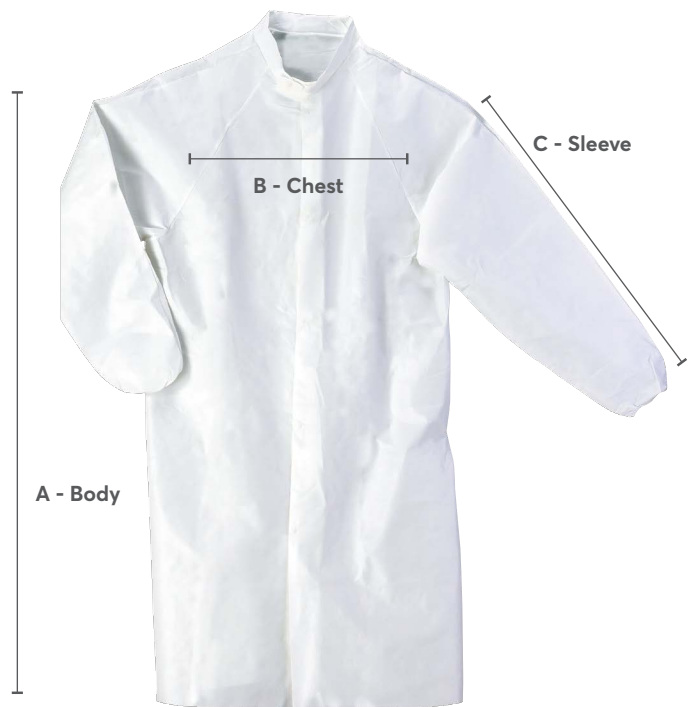
VWR[®] BASIC PROTECTION SMS FROCKS

- Multilayer SMS material
- Light fluid/particulate barrier
- Excellent breathability

VWR Basic Protection SMS Frocks are manufactured from a latex-free, multilayer spunbonded-meltblown-spunbonded (SMS) fabric that offers high tensile strength while remaining soft, comfortable and breathable. These static-dissipative garments act as a fluid and particulate barrier and provide light chemical splash resistance. Frocks are rigorously tested and manufactured in an ISO-certified facility under stringent process controls to ensure that each product meets exacting quality standards and performs to specification. Our products are lot controlled and validated through independent lab testing.

Frock measurements

Size	S	M	L	XL	2X	3X
Body (A)	40½"	42½"	43½"	46"	47½"	51½"
Chest (B)	21¾"	22¾"	23½"	24¾"	26½"	29"
Sleeve (C)	33½"	34½"	35½"	36½"	37½"	40"



VWR® BASIC PROTECTION SMS FROCKS

Fabric Weight	Size	Color	Packaging	Cat. No.
50g/m ²	Small	White	Single Over-Bag, 30/CS	414004-392
50g/m ²	Medium	White	Single Over-Bag, 30/CS	414004-389
50g/m ²	Large	White	Single Over-Bag, 30/CS	414004-388
50g/m ²	X-Large	White	Single Over-Bag, 30/CS	414004-386
50g/m ²	2X-Large	White	Single Over-Bag, 30/CS	414004-385
50g/m ²	3X-Large	White	Single Over-Bag, 30/CS	414004-387
50g/m ²	Medium	Blue	Single Over-Bag, 30/CS	414004-390
50g/m ²	Large	Blue	Single Over-Bag, 30/CS	414004-402
50g/m ²	X-Large	Blue	Single Over-Bag, 30/CS	414004-403
50g/m ²	2X-Large	Blue	Single Over-Bag, 30/CS	414004-401
50g/m ²	3X-Large	Blue	Single Over-Bag, 30/CS	414004-391

To order, visit [vwr.com](https://www.vwr.com) or call your VWR Sales Representative today.

MATERIAL PROPERTIES

Physical properties

Test item	Result	Test standard	Test description
Particle shedding (Helmke drum)	Level II	IEST-RP-CC003.3	Garments are tumbled in a stainless-steel drum for 10 min. Particles are then counted with a laser particle counter.
Weight (g/m²)	50.45	ASTM D3776	Measurement of fabric mass per unit area (weight).
Ball bursting strength (avg. lb/in.)	14.2	ASTM D6797	A steel ball is forced through the fabric with a constant-rate-of-extension (CRE) tensile tester to determine fabric strength.
Tensile strength (avg. lb/in.)			
Warp	13.0	ASTM D5034	Covers the grab and modified grab test procedures for determining the breaking strength and elongation of textile fabrics. Provisions are made for wet testing.
Filling	16.1		
Tearing strength (avg. lb/in.)			
Lengthwise yarns	3.1	ASTM D2261	Measurement of the tearing strength of textile fabrics via the tongue (single rip) procedure using a recording CRE tensile tester.
Widthwise yarns	2.6		

Barrier properties

Test item	Result	Test standard	Test description
Bacterial filtration efficiency*	90%	ASTM F2101	Measurement of the filtration efficiency of the fabric using a challenge organism of <i>Staphylococcus aureus</i> .
Water resistance (avg. g)	16.7	AATCC Method 42	Measures the degree to which the material is a barrier to liquids.

Comfort properties

Test item	Result	Test standard	Test description
Water vapor transmission rate (avg. g/m ² /24 h)	965	ASTM E96	Measurement of the rate at which the fabric transfers water vapor under appropriate conditions.
Air permeability (ft ³ /min/ft ²)	95.3	ASTM D737	Measurement of air permeability to indicate breathability of the fabric.

*Control Average: 2233 CFU.

†Procedure B, Water Method, 73.4°F 50% Rh; Air Gap: ¼".

ALL TEST RESULTS PROVIDED BY INDEPENDENT THIRD-PARTY TESTING LABORATORIES LOCATED IN THE U.S.**WARNING:**

These garments and associated materials are not suitable for use in some environments containing chemicals and/or hazardous agents. It is the responsibility of the user to determine the level of risk in a particular environment and the proper personal protection equipment needed. Garments manufactured from synthetic non-woven material may generate static electricity. Garments that contain an anti-static treatment are not intended to be used as a safety feature. These garments are not recommended to be used in a flammable and/or explosive environment. Contact Avantor® for garment/fabric safety data. The application of these products is out of Avantor's control. Therefore, Avantor® makes no warranties, expressed or implied, and assumes no liability as to the performance of these products for a particular use.

CAUTION:

Avoid heat and/or open flame.

TO ORDER

Visit www.avantorsciences.com or call your Avantor Sales Representative today.