

# VWR® Protection Apparel PRODUCT SPECIFICATIONS

## **VWR Basic Protection SPP Coveralls**

- Economical
- First Line Barrier
- · Maximum Breathability

VWR Basic Protection SPP Coveralls are manufactured from strong, lightweight, and breathable spunbonded polypropylene (SPP) fabric, which protects against dirt, grime, and certain dry particulates in nonhazardous environments. These garments are ideal for less critical areas or pre-gowning entry rooms. Coveralls 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.



## **Coveralls Dimensions**

Size	M	L	XL	2X	3X	4X	5X
Body (A)	37½"	38¾"	40"	40½"	43"	43"	43½"
Chest (B)	241/4"	25"	27"	29¾"	32"	32½"	33½"
Sleeve (C)	34"	34"	36½"	37"	38"	41"	42"
Leg (D)	28½"	29½"	30"	31"	32"	32½"	33"

#### **VWR Basic Protection SPP Coveralls**

Size	Cat. No.	Case of
White		
Medium	414004-340	25
Large	414004-341	25
X-Large	414004-339	25
2X-Large	414004-338	25
3X-Large	414004-337	25
4X-Large	414004-335	25
5X-Large	414004-336	25

To order, visit vwr.com or call your VWR Sales Representative today.

# **Material Properties for VWR® Basic Protection SPP Coveralls**

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 minutes. Particles are then counted with a laser particle counter.		
Weight (g/m²)	48.82	ASTM D3776	Measurement of fabric mass per unit area (weight).		
Ball Bursting Strength (Avg. lbs./in.)	21.1	ASTM D6797	A steel ball is forced through the fabric with a constant-rate-of-extension tensile tester to determine fabric strength.		
Tensile Strength (Avg. lbs./in.)					
Warp	25.9	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	23.1	ASTNI D3034			
Tearing Strength (Avg. lbs./in.)					
Lengthwise Yarns	4.2	ACTM DOOC1	Measurement of the tearing strength of textile fabrics by the tongue (single		
Widthwise Yarns	4.0	ASTIVI D2201	rip) procedure using a recording constant-rate-of-extension-type (CRE) tens testing machine.		
Bacterial Filtration Efficiency*	55%	ASTM F2101	Measurement of the filtration efficiency of the fabric using a challenge organism of <i>Staphylococcus aureus</i> .		
Water Resistance (Avg. g)	21.7	AATCC Method 42	Measures the degree to which the material is a barrier to liquids.		
Water Vapor Transmission Rate (Avg. g/m²/24 hrs.)†	1257	ASTM E96	Measurement of the rate at which the fabric transfers water vapor under appropriate conditions.		
Air Permeability (cu. ft./min./sq. ft.)	840.63	ASTM D737	Measurement of air permeability to indicate breathability of the fabric.		
	Particle Shedding (Helmke Drum)  Weight (g/m²)  Ball Bursting Strength (Avg. lbs./in.)  Tensile Strength (Avg. lbs./in.)  Warp  Filling  Tearing Strength (Avg. lbs./in.)  Lengthwise Yarns  Widthwise Yarns  Bacterial Filtration Efficiency*  Water Resistance (Avg. g)  Water Vapor Transmission Rate (Avg. g/m²/24 hrs.)†  Air Permeability (cu. ft./min./	Particle Shedding (Helmke Drum)  Weight (g/m²) 48.82  Ball Bursting Strength (Avg. lbs./in.)  Tensile Strength (Avg. lbs./in.)  Warp 25.9  Filling 23.1  Tearing Strength (Avg. lbs./in.)  Lengthwise Yarns 4.2  Widthwise Yarns 4.0  Bacterial Filtration Efficiency* 55%  Water Resistance (Avg. g) 21.7  Water Vapor Transmission Rate (Avg. g/m²/24 hrs.)†  Air Permeability (cu. ft./min./ 840.63	Particle Shedding (Helmke Drum)  Level II  Weight (g/m²)  48.82  ASTM D3776  Ball Bursting Strength (Avg. lbs./in.)  Tensile Strength (Avg. lbs./in.)  Warp  25.9  Filling  23.1  Tearing Strength (Avg. lbs./in.)  Lengthwise Yarns  4.2  Widthwise Yarns  4.0  Bacterial Filtration Efficiency*  55%  ASTM D2261  Water Resistance (Avg. g)  21.7  ASTM D277  ASTM E96  ASTM D727  ASTM D727		

<sup>\*</sup>Control Average: 2233 CFU.

#### All test results provided by independent third-party testing laboratories located in USA.

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-stat 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 VWR International for garment/fabric safety data. The application of these products is out of VWR International's control. Therefore, VWR International, LLC 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.



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<sup>†</sup>Procedure B, Water Method, 73.4°F 50% Rh; Air Gap: 1/4".