



## VWR® Maximum Protection Coveralls

- Superior fluid and particulate barrier: >99.9% bacterial filtration efficiency
- Lowest level of particulate shedding: Level I Helmke Drum Classification
- Light chemical splash resistance
- Breathable to ensure user comfort
- Soft, cloth-like fabric with maximum tear strength
- Bonded seam option available

VWR Maximum Protection Coveralls are the cleanest and most durable within the entire VWR Protection line of apparel. Manufactured from a specially formulated breathable microporous fabric, these garments have been engineered to maximize comfort and barrier protection. 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 validated through independent lab testing.

### Coverall Dimensions

Size	M	L	XL	2X	3X	4X	5X
Body (A)	37 1/2"	38 3/4"	40"	40 1/2"	43"	43"	43 1/2"
Chest (B)	24 1/4"	25"	27"	29 3/4"	32"	32 1/2"	33 1/2"
Sleeve (C)	34"	34"	36 1/2"	37"	38"	41"	42"
Leg (D)	28 1/2"	29 1/2"	30"	31"	32"	32 1/2"	33"

## VWR® Maximum Protection Coveralls

Size	Cat. No.	Case of
<b>White</b>		
Medium	414004-315	25
Large	414004-313	25
X-Large	414004-311	25
2X-Large	414004-310	25
3X-Large	414004-312	25
4X-Large	414004-314	25
5X-Large	414004-316	25
<b>White with Attached Non-Skid Boot Covers</b>		
Medium	414004-320	25
Large	414004-321	25
X-Large	414004-317	25
2X-Large	414004-318	25
3X-Large	414004-319	25
4X-Large	414004-686	25

Size	Cat. No.	Case of
<b>White Hooded Coveralls with Attached Fluid-Impervious Boot Covers</b>		
Medium	414004-309	25
Large	414004-308	25
X-Large	414004-305	25
2X-Large	414004-306	25
3X-Large	414004-683	25
4X-Large	414004-684	25
5X-Large	414004-685	25
<b>White with Bonded Seams</b>		
Medium	10847-292	25
Large	10847-294	25
X-Large	10847-222	25
2X-Large	10847-224	25
3X-Large	10847-226	25
4X-Large	10847-228	25
6X-8X Large	10853-872	25

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

## Material Properties for VWR® Collection Maximum Protection Coveralls

	Test Item	Result	Test Standard	Test Description
PHYSICAL PROPERTIES	Particle Shedding (Helmke Drum)	Level I	IEST-RP-CCO03.3	Garments are tumbled in a stainless steel drum for 10 minutes. Particles are then counted with a laser particle counter.
	Weight (g/m <sup>2</sup> )	63	ASTM D3776	Measurement of fabric mass per unit area (weight).
	Thickness	0.22	ASTM D1777	Measurement of fabric thickness.
	Tensile Strength (Avg. lbs./in.)			
	Warp	25.2	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	29.4		
	Tearing Strength (Avg. lbs./in.)			
	Lengthwise Yarns	4.6	ASTM D2261	Measurement of the tearing strength of textile fabrics by the tongue (single rip) procedure using a recording constant-rate-of-extension-type (CRE) tensile testing machine.
	Widthwise Yarns	5.7		
BARRIER PROPERTIES	Bacterial Filtration Efficiency*	>99.9%	ASTM F2101	Measurement of the filtration efficiency of the fabric using a challenge organism of <i>Staphylococcus aureus</i> .
	Water Resistance	Pass	AATCC Method 42	Measures the degree to which the material is a barrier to liquids.
	Synthetic Blood Penetration Resistance	Pass	ASTM F1670-08	Measures the resistance of chemical protective clothing materials to penetration by liquid.
COMFORT PROPERTIES	Water Vapor Transmission Rate (Avg. g/m <sup>2</sup> /24 hrs.)†	733	ASTM E96	Measurement of the rate at which the fabric transfers water vapor under appropriate conditions.
	Delta-P Breathability (mmH <sub>2</sub> O/cm <sup>2</sup> )	>102	MIL-M-36954C	Differential Pressure (Delta-P) is the measured pressure drop across material. Delta-P determines the resistance of the material to air flowing through. Pressure drop also relates to the breathability and comfort.
	Air Permeability (cu. ft./min./sq. ft.)	0.06	ASTM D737	Measurement of air permeability to indicate breathability of fabric.
CHEMICAL RESISTANCE	Sulfuric Acid (70% concentration)	Pass	ASTM F903	Measures the barrier effectiveness of materials used for protective clothing and specimens from finished items of protective clothing (such as seamed and other discontinuous regions), against liquids.
	Phosphoric Acid (85% Concentration)	Pass		
	Hydrochloric Acid (37% Concentration)	Pass		
	Household Bleach (100% Concentration)	Pass		

\*Control Average: 2928 CFU.

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

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

**WARNING:** These garments 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 materials 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.