

VWR Irradiated Coveralls

- Gamma Irradiated to a Sterility Assurance Level (SAL) of 10⁻⁴
- Lowest Level of Particle Shedding: Level I Helmke Drum Classification
- Durable Fabric with Excellent Breathability and Water Vapor Transmission Rate
- Significant Fluid and Particulate Barrier: 99.9% Bacterial Filtration Efficiency
- Soft, Cloth-Like Fabric

VWR Irradiated Coveralls are manufactured from a specially formulated breathable microporous fabric that provides significant fluid and barrier protection. These garments exhibit excellent water vapor transmission to optimize user comfort. Coveralls are gamma irradiated to address the concern of bio-burden contamination. Manufactured and packaged in an ISO Class 8 (FED-STD-209E Class 100,000/M3.5) cleanroom, garments are packed individually in sealed polyethylene bags contained within a larger carton liner. Each case is supplied with a certificate of irradiation.

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.



Coveralls Dimensions

Size	S	М	L	XL	2X	3X
Body (A)	36½"	37½"	38¾"	40"	401⁄2"	43"
Chest (B)	23"	241⁄4"	25"	27"	29¾"	32"
Sleeve (C)	321⁄2"	34"	34"	36½"	37"	38"
Leg (D)	28"	28½"	29½"	30"	31"	32"

VWR Irradiated Coveralls

Size	Cat. No.	Case of
White		
Small	414004-443	25
Medium	414004-444	25
Large	414004-445	25
X-Large	414004-446	25
2X-Large	414004-447	25
3X-Large	414004-448	25
White Hooded C	overalls with Attached Fluid-Imperviou	is Boot Covers
Small	414004-449	25
Medium	414004-450	25
Large	414004-451	25
X-Large	414004-452	25
2X-Large	414004-453	25
3X-Large	414004-454	25

Material Properties for VWR® Irradiated Coveralls

	Test Item	Result	Test Standard	Test Description
	Particle Shedding (Helmke Drum)	Level I	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)	56	ASTM D3776	Measurement of fabric mass per unit area (weight).
	Thickness (mm)	0.21	ASTM D1777	Measurement of fabric thickness.
PHYSICAL PROPERTIES	Tensile Strength (Avg. lbs./in.) Warp Filling	22 21	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.
a	Tearing Strength (Avg. lbs./in.)		1	
	Lengthwise Yarns	6.1		Measurement of the tearing strength of textile fabrics by the tongue (single
	Widthwise Yarns	8.7	ASTM D2261	rip) procedure using a recording constant-rate-of-extension-type (CRE) tensile testing machine.

ER TIES	Bacterial Filtration Efficiency (28.3L/min.,1cfm)	99.9%	ASTM F2101	Measurement of the filtration efficiency of the fabric using a challenge organism of <i>Staphylococcus aureus</i> .
PER	Water Resistance	Zero Penetration	AATCC Method 42	Measures the degree to which the material is a barrier to liquids.
BA PRO	Synthetic Blood Penetration Resistance	Pass	ASTM F1670-08	Measures the resistance of chemical protective clothing materials to penetration by liquids.

COMFORT PROPERTIES	Water Vapor Transmission Rate (Avg. g/m²/24 hrs.)*	777	ASTM E96	Measurement of the rate at which the fabric transfers water vapor under appropriate conditions.
	Delta P Breathability (mmH ₂ 0/cm ²)	>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 the fabric.

	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.
MICAL TANCE	Phosphoric Acid (85% Concentration)	Pass		
CHEMICAL RESISTANCE	Hydrochloric Acid (37% Concentration)	Fail		
	Household Bleach (100% Concentration)	Fail		

*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 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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