

# VWR® protection apparel

01. SINGLE-USE AND  
REUSABLE GARMENTS

02. CLEANROOM GLOVES

03. PRODUCTS FOR CONTROLLED  
ENVIRONMENTS AND  
CLEANROOMS



# Avantor® protection apparel

Protect your staff, the integrity of your product and your production environment with a comprehensive portfolio of protection apparel from Avantor®. We have you covered from head to toe with the latest single-use and reusable garments - from sterile coveralls to basic shoe covers.

No matter what level of protection you need in your apparel, VWR® Protection is uniquely tailored to serve your demanding requirements ranging from general-use applications to strict manufacturing cleanroom environments.

Learn more about our focus on providing personal protection solutions by visiting the Controlled Environment page at [vwr.com/CE](https://www.vwr.com/CE) or contact your local VWR Controlled Environment Specialist today.



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Material Properties

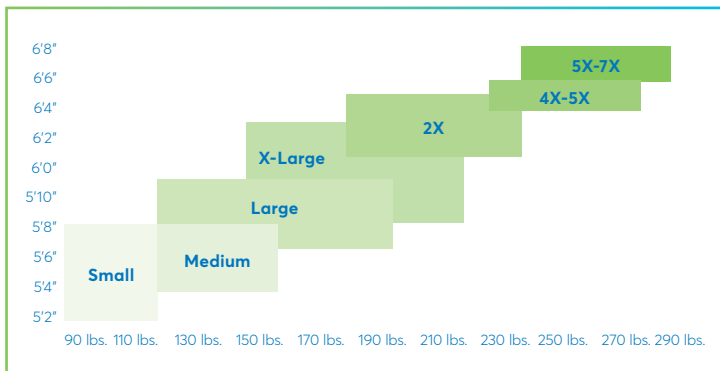
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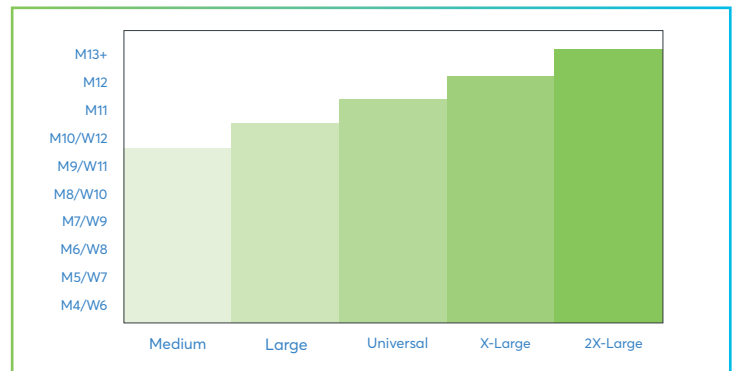
# Apparel that meets high quality standards

VWR® protection apparel is rigorously tested and manufactured in ISO certified facilities under stringent process controls to ensure that each product meets exact quality standards and performs to specification.

## GARMENT SIZING CHART



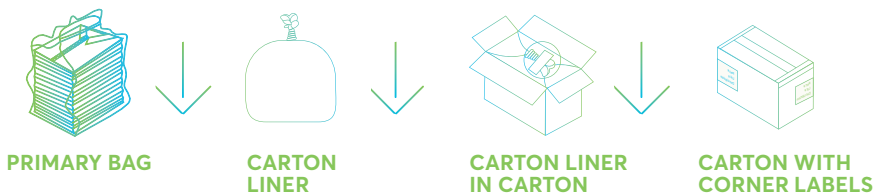
## SHOE AND BOOT COVER SIZING CHART



## APPAREL ICON LEGEND

	Tapered collar		Elastic cuffs		Snap front		Boots attached		Fluid impervious		Fully textured		Available in white		Available in yellow		Available in navy
	Snap collar		Knit cuffs		Pockets		Ankle ties		Beaded cuff		Anti-static		Available in blue		Available in green		
	Inset sleeves		Thumb loops		Elastic hood		Anti-skid		Ambidextrous		Irradiated to 10 <sup>-4</sup> SAL		Available in black		Available in pink		
	Raglan sleeves		Zipper front		With ties		Non-skid		Textured fingers		Irradiated to 10 <sup>-6</sup> SAL		Available in red		Available in gray		

## GENERAL USE GARMENTS PACKAGING



VWR® protection apparel products are packaged in a primary heat-sealed bag, carton liner and outer corrugated carton to effectively manage cross-contamination and contamination migration from one environment to another. All open seams on shipping containers are tape

sealed to stop contamination migration. All garments are precision folded and stacked within the primary bag to permit efficient storage with or without bins. Four-sided carton labeling allows easy identification and inventory management.

## SEAM CONSTRUCTION



### SERGED SEAMS

Threads interlock around material edges to create strong, stress-resistant seams.



### SONICALLY WELDED SEAMS

Material is ultrasonically welded to create exceptionally strong seams, eliminate thread and needle holes and provide a seal against particles and fluids.

# Ensure your garments suit the work you do

## TEST MINIMUM GOWNING REQUIREMENTS

Required for each ISO class

Required Apparel	ISO Class 8 (Class 100,000)	ISO Class 7 (Class 10,000)	ISO Class 6 (Class 1,000)	ISO Class 5 (Class 100)	ISO Class 4 (Class 10)
Hair Cover	✓	✓	✓	✓	✓
Hood				✓	✓
Beard Cover	✓	✓	✓	✓	✓
Face Mask		✓	✓	✓	✓
Gloves	✓	✓	✓	✓	✓
Frock	✓	✓			

\* Reference IEST-RP-CC0003.3

Required Apparel	ISO Class 8 (Class 100,000)	ISO Class 7 (Class 10,000)	ISO Class 6 (Class 1,000)	ISO Class 5 (Class 100)	ISO Class 4 (Class 10)
Coverall			✓	✓	✓
Shoe Covers	✓	✓	✓	✓	✓
Boot Covers				✓	✓
Goggles	✓	✓	✓	✓	✓

\*Reference IEST-RP-CC0003

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 for use in a flammable and explosive environment. Contact VWR®, part of Avantor® for garment/fabric safety data. The application of these products is out of VWR's control. Therefore, VWR International, LLC makes no warranties, express or implied, and assumes no liability as to the performance of these products for a particular use. CAUTION: Avoid heat and/or open flame.

## VWR COLLECTION GARMENTS

Select the proper level of protection for your environment

End Use Environments													
Compatible VWR® Collection Apparel	Food & Bev	Warehouse	Research Lab	Compounding Pharmacy	Small Animal Vivarium	Large Animal Vivarium	Bioburden Control	Sterile	ISO 5 (Class 100)	ISO 6 (Class 1,000)	ISO 7 (Class 10,000)	ISO 8 (Class 100,000)	Non-regulated Controlled Environment
VWR® Basic Protection Industrial	✓	✓	✓										
VWR® Basic Protection SPP	✓	✓	✓		✓							✓	✓
VWR® Basic Protection SMS	✓	✓	✓	✓	✓						✓	✓	✓
VWR® Advanced Protection	✓		✓	✓		✓				✓	✓	✓	✓
VWR® Maximum Protection				✓		✓			✓	✓	✓	✓	✓
VWR® Irradiated				✓			✓		✓	✓	✓	✓	✓
VWR® Sterile				✓			✓	✓	✓	✓	✓	✓	✓
VWR® Signature with DuPont™ Tyvek® Isoclean®			✓	✓		✓			✓	✓	✓	✓	✓
VWR® Reusable	✓		✓	✓	✓	✓							

The information above provides guidelines only. It is the responsibility of the user to determine the level of risk in a particular environment and the proper personal protection equipment needed. An apparel item that is deemed suitable for one ISO class is also suitable for higher ISO classes (i.e., items suitable for Class 5 are also suitable for ISO Classes 6, 7, and 8).

# VWR® Controlled Environment Specialist Team

We offer **free consultative services** to support your specific requirements

The VWR® Controlled Environment Specialist Team is regionally located across the U.S. to support customers nationwide. With over 100 years of collective experience in controlled environments, each highly trained specialist has technical and industry experience including training ISO and IEST protocols. They are members of IEST and PDA, and stay current on all industry trends and protocols. Our Controlled Environment Specialist Team also has expansive product and supplier knowledge to effectively recommend the best solutions to meet your needs. Consultations are available at no charge. Our specialists offer cost and process improvement solutions tailored to your unique requirements.

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## Services include:

- Gowning protocol
- Process and workflow efficiency reviews
- Standardization targets
- Risk assessments
- Cleaning/disinfecting programs
- Cost containment
- Innovation



# VWR® Made in USA PPE Line

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PERSONAL PROTECTION EQUIPMENT  
EXCLUSIVELY PRODUCED IN THE U.S.

MASKS, LAB COATS, SCRUBS, OVERALLS  
AND SHOE COVERS

MEETS STANDARDS FOR  
CONTROLLED ENVIRONMENTS



**VWR® ALLIANCE CLEANROOM HOOD**  
AN IDEAL OPTION FOR SINGLE-USE NEEDS, MADE  
WITH THE SPECIALLY FORMULATED ALLIANCE  
BREATHABLE MICROPOROUS FABRIC

- Individually bagged
- Available with bound or serged seams
- White finish



Apparel icon legend:  
page 4

Clothing size	Description	Color	Cat. No.
M	Alliance cleanroom hood with serged seams	White	76470-710
L	Alliance cleanroom hood with serged seams	White	76470-706
M	Alliance cleanroom hood with bound seams	White	76470-712
L	Alliance cleanroom hood with bound seams	White	76470-708

**VWR® SMS CLEANROOM HOOD**  
FOR SINGLE-USE APPLICATIONS

- Individually bagged
- Serged seams
- White finish



Apparel icon legend:  
page 4

Clothing size	Description	Color	Cat. No.
Universal	SMS cleanroom hood with serged seams	White	76470-790

**VWR® CLEANROOM MASK WITH EARLOOPS**  
THE COMBINATION OF STRONG BFE AND PFE MAKE THESE MASKS  
IDEAL FOR USE IN PRODUCTION OR RESEARCH AREAS

- Protection against bacteria and particles
- Three-ply construction
- Non sterile
- With earloops



Apparel icon legend:  
page 4



Description	Color	Sterility	Cat. No.
VWR® cleanroom mask with earloops	White	Non sterile	76451-956



### VWR® CLEANROOM MASK WITH TIES

THE COMBINATION OF STRONG BFE AND PFE MAKE THESE MASKS IDEAL FOR USE IN PRODUCTION OR RESEARCH AREAS

- Protection against bacteria and particles
- Three-ply construction
- Non sterile
- Tie configuration



Apparel icon legend:  
page 4

Description	Color	Sterility	Cat. No.
VWR® cleanroom mask with ties	White	Non sterile	76409-318

### VWR® STERILE MASKS

THE QUINTESSENTIAL OPTION FOR SINGLE-USE NEEDS

- Individually bagged
- Available with earloop or tie configurations
- Three-ply construction
- Gamma irradiated to 10<sup>-6</sup>
- Enclosed plastic encapsulated nose wire



Apparel icon legend:  
page 4

Description	Size	Color	Cat. No.
Masks with earloop	7W×4"H	White	76470-110
Masks with ties	7W×4"H	White	76470-112



### VWR® SMS SLEEVE

AN IDEAL OPTION FOR SINGLE-USE NEEDS

- Individually bagged



Apparel icon legend:  
page 4

Description	Length	Color	Cat. No.
Without thumb loop	24"	White	76491-710

### VWR® ALLIANCE SLEEVES

FOR SINGLE-USE NEEDS, MADE WITH THE SPECIALLY FORMULATED ALLIANCE BREATHABLE MICROPOROUS FABRIC

- Individually bagged
- Available with thumb loop configuration



Apparel icon legend:  
page 4

Description	Length	Color	Cat. No.
With thumb loop	21"	White	76491-714
Without thumb loop	21"	White	76491-708



### VWR® STERILE ALLIANCE SLEEVES

OPTION FOR SINGLE-USE NEEDS, MADE WITH THE SPECIALLY FORMULATED ALLIANCE BREATHABLE MICROPOROUS FABRIC

- Individually bagged
- Available with thumb loop configuration



Apparel icon legend:  
page 4

Description	Length	Color	Cat. No.
Without thumb loop	21"	White	76491-706
With thumb loop	21"	White	76491-712

### VWR® ALLIANCE PROTECTOR SLEEVES

AN IDEAL OPTION FOR SINGLE-USE NEEDS, MADE WITH THE SPECIALLY FORMULATED ALLIANCE BREATHABLE MICROPOROUS FABRIC

- Available with serged or bound seams
- Produced with latex-free elastic



Apparel icon legend:  
page 4

Description	Length	Color	Cat. No.
Alliance protector sleeve with bound seams	20"	White	76470-702
Alliance protector sleeve with serged seams	20"	White	76470-788

### VWR® SMS SLEEVES

AN IDEAL OPTION FOR SINGLE-USE NEEDS

- Three-layer SMS construction
- Serged seams
- Produced with latex-free elastic



Apparel icon legend:  
page 4

Description	Length	Color	Cat. No.
SMS sleeve with serged seams	20"	White	76470-786

### VWR® ETO STERILIZED ALLIANCE SLEEVES

AN IDEAL OPTION FOR SINGLE-USE NEEDS, MADE WITH THE SPECIALLY FORMULATED ALLIANCE BREATHABLE MICROPOROUS FABRIC

- Individually bagged



Apparel icon legend:  
page 4

Description	Length	Color	Cat. No.
Alliance sleeve with bound seams	21"	White	76470-704

## VWR® MICROPOROUS MATERIAL LAB COATS

### EXCELLENT BREATHABILITY FOR MULTIPLE APPLICATIONS

- Microporous two-layer material, 60 gsm
- Fluid and particulate barrier
- Serged seams
- Three pocket or no pocket options
- Knit or standard collar
- Open, elastic or knit cuff



Apparel icon legend:  
page 4



Clothing size	Color	Cat. No.
<b>Lab Coat with three Pockets, Snap Front, and Knit Cuffs</b>		
S	White	76457-656
M	White	76457-658
L	White	76457-660
XL	White	76457-662
XXL	White	76457-664
3XL	White	76457-666
4XL	White	76470-670
5XL	White	76470-672
6XL	White	76470-674
7XL	White	76470-676
<b>Lab Coat with three Pockets, Snap Front, Knit Cuffs and Collar</b>		
S	White	76457-680
M	White	76457-682
L	White	76457-684
XL	White	76457-686
XXL	White	76457-688
3XL	White	76457-690
4XL	White	76470-686
5XL	White	76470-688
6XL	White	76470-690
7XL	White	76470-692
<b>Lab Coat with No Pockets, Snap Front, and Elastic Cuffs</b>		
S	White	76457-692
M	White	76457-694
L	White	76457-696
XL	White	76457-698
XXL	White	76457-700
3XL	White	76457-702
4XL	White	76470-694
5XL	White	76470-696
6XL	White	76470-698
7XL	White	76470-700
<b>Lab Coat with No Pockets, Snap Front, and Open Cuffs</b>		
S	White	76457-668
M	White	76457-670
L	White	76457-672
XL	White	76457-674
XXL	White	76457-676
3XL	White	76457-678
4XL	White	76470-678
5XL	White	76470-680
6XL	White	76470-682
7XL	White	76470-684

Visit [vwr.com](https://www.vwr.com) for all available sizes



## VWR® SMS LAB COATS

### PROVIDES MULTILAYER SMS MATERIAL PROTECTION

- Light fluid and particulate barrier
- Excellent breathability
- Serged seams
- Standard or knit collar options
- Elastic, open or knit cuff design
- White or blue color options



Apparel icon legend:  
page 4

Clothing size	Color	Cat. No.
Lab Coats with three Pockets, Snap Front, Standard Collar and Knit Cuffs*		
S	Blue	76457-008
M	Blue	76457-010
L	Blue	76457-012
XL	Blue	76457-014
XXL	Blue	76457-016
3XL	Blue	76457-018
4XL	Blue	76463-370
5XL	Blue	76463-372
6XL	Blue	76463-374
7XL	Blue	76463-376
Lab Coats without Pockets, Snap Front, Standard Collar and Open Cuffs*		
S	Blue	76457-020
M	Blue	76457-022
L	Blue	76457-024
XL	Blue	76457-026
XXL	Blue	76457-028
3XL	Blue	76457-030
4XL	Blue	76470-582
5XL	Blue	76470-584
6XL	Blue	76470-586
7XL	Blue	76470-588

\*Also available in white

Clothing size	Color	Cat. No.
Lab Coats with three Pockets, Snap front, Knit Collar and Knit Cuffs*		
S	Blue	76457-048
M	Blue	76457-050
L	Blue	76457-052
XL	Blue	76457-054
XXL	Blue	76457-056
3XL	Blue	76457-058
4XL	Blue	76470-606
5XL	Blue	76470-608
6X	Blue	76470-610
7XL	Blue	76470-612
Lab Coats without Pockets, Snap Front, Standard Collar and Elastic Cuffs*		
S	Blue	76457-060
M	Blue	76457-062
L	Blue	76457-064
XL	Blue	76457-066
XXL	Blue	76457-068
3XL	Blue	76457-070
4XL	Blue	76470-614
5XL	Blue	76470-616
6XL	Blue	76470-618
7XL	Blue	76470-620

## VWR® SMS COVERALLS – MADE IN USA

## AN IDEAL OPTION FOR SINGLE-USE NEEDS

- Three-layer SMS construction
- Serged seams
- Produced with latex-free elastic
- Made in USA



Apparel icon legend:  
page 4



Clothing size	Color	Cat. No.
<b>Coverall with Open Wrists and Ankles</b>		
S	Blue	76456-900
M	Blue	76456-902
L	Blue	76456-904
XL	Blue	76456-906
XXL	Blue	76456-908
3XL	Blue	76456-910
4XL	Blue	76470-494
5XL	Blue	76470-496
6XL	Blue	76470-498
7XL	Blue	76470-500
S	White	76456-912
M	White	76456-914
L	White	76456-916
XL	White	76456-918
XXL	White	76456-920
3XL	White	76456-922
4XL	White	76470-502
5XL	White	76470-504
6XL	White	76470-506
7XL	White	76470-508
<b>Coverall with Elastic Wrists and Ankles</b>		
S	Blue	76457-138
M	Blue	76457-140
L	Blue	76457-142
XXL	Blue	76456-924
3XL	Blue	76456-926
4XL	Blue	76470-510
5XL	Blue	76470-512
6XL	Blue	76470-514
7XL	Blue	76470-516
S	White	76457-146
M	White	76457-148
L	White	76457-150
XL	Blue	76457-144
XL	White	76457-152
XXL	White	76456-928
3XL	White	76456-930
4XL	White	76470-518
5XL	White	76470-520
6XL	White	76470-522
7XL	White	76470-524
<b>Coverall with Hood, Elastic Wrists and Ankles</b>		
S	Blue	76456-932
M	Blue	76456-934
L	Blue	76456-936
XL	Blue	76456-938
XXL	Blue	76456-940
3XL	Blue	76456-942
4XL	Blue	76470-526
5XL	Blue	76470-528
6XL	Blue	76470-530
7XL	Blue	76470-532

Clothing size	Color	Cat. No.
<b>Coverall with Hood, Elastic Wrists and Ankles</b>		
S	White	76456-944
M	White	76456-946
L	White	76456-948
XL	White	76456-950
XXL	White	76456-952
3XL	White	76456-954
4XL	White	76470-534
5XL	White	76470-536
6XL	White	76470-538
7XL	White	76470-540
<b>Coverall with Hood and Boots, Elastic Wrists</b>		
S	Blue	76456-956
M	Blue	76456-958
L	Blue	76456-960
XL	Blue	76456-962
XXL	Blue	76456-964
3XL	Blue	76456-966
4XL	Blue	76470-542
5XL	Blue	76470-544
6XL	Blue	76470-546
7XL	Blue	76470-548
S	White	76456-968
M	White	76456-970
L	White	76456-972
XL	White	76456-974
XXL	White	76456-976
3XL	White	76456-978
4XL	White	76470-550
5XL	White	76470-552
6XL	White	76470-554
7XL	White	76470-556
<b>Coverall with Boots and Elastic Wrists</b>		
S	Blue	76456-992
M	Blue	76456-994
L	Blue	76456-996
XL	Blue	76456-998
XXL	Blue	76457-000
3XL	Blue	76457-002
4XL	Blue	76470-566
5XL	Blue	76470-568
7XL	Blue	76470-572
S	White	76456-980
M	White	76456-982
L	White	76456-984
XL	White	76456-986
XXL	White	76456-988
3XL	White	76456-990
4XL	White	76470-558
5XL	White	76470-560
6XL	White	76470-562
7XL	White	76470-564

## VWR® MICROPOROUS MATERIAL COVERALLS

### FLUID AND PARTICULATE BARRIER

- Microporous, 60 gsm, two-layer material
- Excellent breathability
- Serged seams
- Hood and boot options
- Elastic or open cuff and ankle options



Apparel icon legend:  
page 4

Clothing size	Description	Color	Cat. no.
<b>Coverall with open wrists and ankles</b>			
S	Open wrists and ankles	White	76457-596
M	Open wrists and ankles	White	76457-598
L	Open wrists and ankles	White	76457-600
XL	Open wrists and ankles	White	76457-602
XXL	Open wrists and ankles	White	76457-604
3XL	Open wrists and ankles	White	76457-606
4XL	Open wrists and ankles	White	76470-630
5XL	Open wrists and ankles	White	76470-632
6XL	Open wrists and ankles	White	76470-634
7XL	Open wrists and ankles	White	76470-636
<b>Coverall with elastic wrists and ankles</b>			
S	Elastic wrists and ankles	White	76457-608
M	Elastic wrists and ankles	White	76457-610
L	Elastic wrists and ankles	White	76457-612
XL	Elastic wrists and ankles	White	76457-614
XXL	Elastic wrists and ankles	White	76457-616
3XL	Elastic wrists and ankles	White	76457-618
4XL	Elastic wrists and ankles	White	76470-638
5XL	Elastic wrists and ankles	White	76470-640
6XL	Elastic wrists and ankles	White	76470-642
7XL	Elastic wrists and ankles	White	76470-644
<b>Coverall with hood, elastic wrists and ankles</b>			
S	Elastic wrists and ankles, with hood	White	76457-620
M	Elastic wrists and ankles, with hood	White	76457-622
L	Elastic wrists and ankles, with hood	White	76457-624
XL	Elastic wrists and ankles, with hood	White	76457-626
XXL	Elastic wrists and ankles, with hood	White	76457-628
3XL	Elastic wrists and ankles, with hood	White	76457-630
4XL	Elastic wrists and ankles, with hood	White	76470-646
5XL	Elastic wrists and ankles, with hood	White	76470-648
6XL	Elastic wrists and ankles, with hood	White	76470-650
7XL	Elastic wrists and ankles, with hood	White	76470-652
<b>Coverall with hood and boots, elastic wrists</b>			
S	Elastic wrists, with hood and boots	White	76457-632
M	Elastic wrists, with hood and boots	White	76457-634
L	Elastic wrists, with hood and boots	White	76457-636
XL	Elastic wrists, with hood and boots	White	76457-638
XXL	Elastic wrists, with hood and boots	White	76457-640
3XL	Elastic wrists, with hood and boots	White	76457-642
4XL	Elastic wrists, with hood and boots	White	76470-654
5XL	Elastic wrists, with hood and boots	White	76470-656
6XL	Elastic wrists, with hood and boots	White	76470-658
7XL	Elastic wrists, with hood and boots	White	76470-660



Clothing size	Description	Color	Cat. no.
<b>Coverall with boots, elastic wrists</b>			
S	Elastic wrists, with boots	White	76457-644
M	Elastic wrists, with boots	White	76457-646
L	Elastic wrists, with boots	White	76457-648
XL	Elastic wrists, with boots	White	76457-650
XXL	Elastic wrists, with boots	White	76457-652
3XL	Elastic wrists, with boots	White	76457-654
4XL	Elastic wrists, with boots	White	76470-662
5XL	Elastic wrists, with boots	White	76470-664
6XL	Elastic wrists, with boots	White	76470-666
7XL	Elastic wrists, with boots	White	76470-668

## VWR® DISPOSABLE LONG SLEEVE SCRUB SHIRTS

### AN IDEAL OPTION FOR SINGLE-USE NEEDS

- No pocket
- Snap adjustable neck closure available
- Perfect with VWR® Disposable Scrub Pants (see page 16)



Apparel icon legend:  
page 4



Clothing size	Color	Cat. No.
<b>Scrub Shirts with Snap Adjustable Neck, Elastic Cuffs</b>		
S	Blue	10755-052
M	Blue	10754-966
L	Blue	10754-968
XL	Blue	10754-970
XXL	Blue	10754-972
3XL	Blue	10754-974
4XL	Blue	10754-976
5XL	Blue	10754-978
<b>Scrub Shirts with Plain Neck, Elastic Cuffs</b>		
L	Blue	89184-502
XL	Blue	89184-504
XXL	Blue	89184-506
3XL	Blue	89184-508
4XL	Blue	89184-510
5XL	Blue	89184-512

## VWR® DISPOSABLE SHORT SLEEVE SCRUB SHIRTS

### AN IDEAL OPTION FOR SINGLE-USE NEEDS

- Pockets available\*
- Perfect with VWR® Disposable Scrub Pants (see page 16)



Apparel icon legend:  
page 4

Clothing size	Color	Cat. No.
<b>Short Sleeve Scrub Shirt, No Pocket, Plain Neck</b>		
S	Blue	76470-792
M	Blue	76470-794
L	Blue	76470-796
XL	Blue	76470-798
XXL	Blue	76470-800
3XL	Blue	76470-802
4XL	Blue	76470-804
5XL	Blue	76470-806
6XL	Blue	76470-714
7XL	Blue	76470-716
<b>Short Sleeve Scrub Shirt, No Pocket, Bound Neck</b>		
S	Blue	76470-718
M	Blue	76470-720
L	Blue	76470-722
XL	Blue	76470-724
XXL	Blue	76470-726
3XL	Blue	76470-728
4XL	Blue	76470-730
5XL	Blue	76470-732
6XL	Blue	76470-734
7XL	Blue	76470-736

\*Visit [vwr.com](http://vwr.com) for all available sizes with and without pockets



Apparel icon legend:  
page 4



### VWR® DISPOSABLE SCRUB PANTS AN IDEAL OPTION FOR SINGLE-USE NEEDS

- Elastic waist
- Single use
- Hip pockets available
- Perfect with VWR® Disposable Scrub Shirts (see page 15)

Clothing size	Color	Cat. No.
<b>Scrub Pants with Pockets</b>		
XS	Blue	76006-546
S	Blue	76006-548
M	Blue	75832-236
L	Blue	75832-238
XL	Blue	75832-240
XXL	Blue	75832-242
3XL	Blue	75832-244
4XL	Blue	75832-246
5XL	Blue	75832-248
6XL	Blue	75832-250
7XL	Blue	75832-252
<b>Scrub Pants without Pockets</b>		
XS	Blue	76006-532
S	Blue	76006-534
M	Blue	76006-536
L	Blue	76006-538
XL	Blue	76006-540
XXL	Blue	76006-542
3XL	Blue	76006-544
4XL	Blue	76006-546
5XL	Blue	76006-548
6XL	Blue	75832-232
6XL	Blue	76006-542
7XL	Blue	75832-234
7XL	Blue	76006-544
S	White	76463-406
M	White	76463-408
L	White	76463-410
XL	White	76463-412
XXL	White	76463-414
3XL	White	76463-416
4XL	White	76463-418
5XL	White	76463-420
6XL	White	76463-422
7XL	White	76463-424



### VWR® SMS SHOECOVERS AN IDEAL OPTION FOR SINGLE-USE NEEDS, FORMULATED WITH A THREE-LAYER SMS MATERIAL

- Available in white or blue
- White color available with anti-skid treatment



Apparel icon legend:  
page 4

Description	Color	Cat. No.
SMS shoe covers	White	76491-700
SMS shoe covers, anti-skid	White	76491-704
SMS shoe covers	Blue	76491-698

### VWR® ALLIANCE MICROPOROUS SHOECOVERS AN IDEAL OPTION FOR SINGLE-USE NEEDS, MADE WITH THE SPECIALLY FORMULATED ALLIANCE BREATHABLE MICROPOROUS FABRIC

- White finish
- Available with or without anti-skid treatment



Apparel icon legend:  
page 4

Description	Color	Cat. No.
Alliance microporous shoe covers	White	76491-696
Alliance microporous shoe covers, anti-skid	White	76491-702

# VWR® Advanced Protection

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DURABLE MATERIAL

EXCELLENT BREATHABILITY

CLOTH-LIKE FABRIC



VWR® ADVANCED PROTECTION COVERALLS,  
LAB COATS AND FROCKS

- Durable fabric with excellent breathability and water vapor transmission rate
- Significant fluid and particulate barrier: 99.9% bacterial filtration efficiency
- Particle shedding: Level II Helmke Drum Classification
- Soft, cloth-like fabric
- Appropriate for ISO 6 and higher

Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level II	IENT-RP-CC003.3
Weight (g/m²)	56	ASTM D3776
Thickness (mm)	0.21	ASTM D1777
Tensile Strength (Avg. lbs./in.)		
Warp	21.7	ASTM D5034
Filling	25.0	
Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	3.4	ASTM D2261
Widthwise Yarns	4.8	
Barrier Properties		
Bacterial Filtration Efficiency*	99.9%	ASTM F2101
Water Resistance	Pass	AATCC Method 42
Synthetic Blood Penetration Resistance	Pass	ASTM F1670-08
Comfort Properties		
Water Vapor Transmission Rate (Avg. g/m²/24 hrs.)†	777	ASTM E96
Delta P Breathability (mmH2O/cm²)	>102	MIL-M-36954C
Air Permeability (cu. ft./min./sq. ft.)	0.06	ASTM D737
Chemical Resistance		
Sulfuric Acid (70% Concentration)	Pass	ASTM F903
Phosphoric Acid (85% Concentration)	Pass	
Hydrochloric Acid (37% Concentration)	Fail	
Household Bleach (100% Concentration)	Fail	

\*Control Average: 2928 CFU. †Procedure B, Water Method, 73.4°F 50% Rh; Air Gap: ¼".

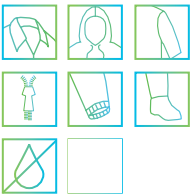
Coverall dimensions

Size	S	M	L	XL	2X	3X	4X	5X	7X
Body (1)	36½"	37½"	38¾"	40"	40½"	43"	43"	43½"	44"
Chest (2)	23"	24¼"	25"	27"	29¾"	32"	32½"	33½"	40½"
Sleeve (3)	32½"	34"	34"	36½"	37"	38"	41"	40½"	42"
Leg (4)	28"	28½"	29½"	30"	31"	32"	32½"	33"	34"



Coverall

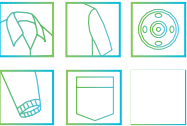
VWR® ADVANCED PROTECTION COVERALLS



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White		
Small	414004-298	25
Medium	414004-297	25
Large	414004-296	25
X-Large	414004-293	25
2X-Large	414004-291	25
3X-Large	414004-292	25
4X-Large	414004-295	25
5X-Large	414004-294	25
7X-Large	89234-864	25
White, Hooded, with Attached Fluid-Impervious Boot Covers		
Large	414004-304	25
X-Large	414004-299	25
2X-Large	414004-300	25
3X-Large	414004-301	25
4X-Large	414004-303	25
5X-Large	89234-866	25
7X-Large	89234-868	25

VWR® ADVANCED PROTECTION LAB COATS

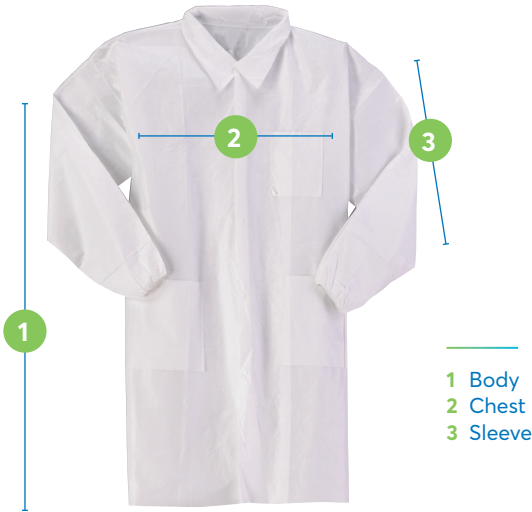


Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White		
Small	414004-380	25
Medium	414004-378	25
Large	414004-376	25
X-Large	414004-375	25
2X-Large	414004-379	25
3X-Large	414004-377	25

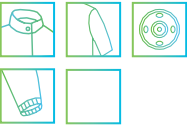
Lab Coat dimensions

Size	S	M	L	XL	2X	3X
Body (1)	36¾"	39½"	40"	42¾"	43½"	44½"
Chest (2)	24¼"	25¼"	27"	27¾"	29½"	30¾"
Sleeve (3)	30"	30¼"	32½"	33"	37½"	38¼"



Lab Coats

VWR® ADVANCED PROTECTION FROCKS



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White		
Small	414004-410	25
Medium	414004-407	25
Large	414004-406	25
X-Large	414004-404	25
2X-Large	414004-405	25
3X-Large	414004-408	25
4X-Large	414004-409	25

Frock dimensions

Size	S	M	L	XL	2X	3X	4X
Body (1)	40½"	42½"	43½"	46"	47½"	51½"	52½"
Chest (2)	21¾"	22¾"	23½"	24¾"	26½"	29"	29½"
Sleeve (3)	33½"	34½"	35½"	36½"	37½"	40"	41"



Frocks

### VWR® ADVANCED PROTECTION SPP BOUFFANT CAPS

- First line barrier
- Higher basis weight for increased protection
- Non-linting

VWR® Advanced Protection SPP Bouffant Caps are manufactured from strong, breathable spunbonded polypropylene (SPP) fabric, which protects against dirt, grime and certain dry particulates in nonhazardous environments. Packaged 100 bouffant caps per pack, 10 packs per case.

#### Material properties

Test Item	Result	Test Standard
<b>Physical Properties</b>		
Particle Shedding (Helmke Drum)	Level I*	TEST-RP-CC003.3
Weight (g/m²)	14.0	ASTM D3776
<b>Tensile Strength (Avg. lbs./in.)</b>		
Warp	>17	ASTM D5034
Filling	>9	
Elongation (%)	>35	

\*Avg. particles ( $\geq 0.5\mu\text{m}/\text{cu. ft.}$ ): 34.

Note: The data shown above represent typical values at the time of publication. These are not specifications. All test results provided by independent third-party testing laboratories located in USA.

### VWR® ADVANCED PROTECTION MASKS

- Three-ply masks guard against bacteria and particulates
- Highly breathable and fluid-resistant
- Malleable noseband ensures custom, secure seal

VWR® Advanced Protection Masks feature three-ply construction for excellent particle and bacterial filtration efficiency. These masks are available with spandex ear loops or polypropylene ties, ultrasonically welded to maintain softness and protect against particulates. An encased, 12 cm (4¾") malleable steel noseband creates a secure facial seal and improves wearer comfort. Latex free. Packaged 50 masks per pack, 10 packs per case. Mask dimensions: 17.5L x 9.5H cm (6⅞ x 3¾").

#### Material properties

Test Item	Result	Test Standard
<b>Barrier Properties</b>		
Bacterial Filtration Efficiency* (%)	99	ASTM F2101
Particle Filtration Efficiency* (%)	99	ASTM F2299
<b>Comfort Property</b>		
Delta P Breathability (mmH <sub>2</sub> O/cm²)	1.9–2.2	MIL-M-36954C

\*Control Average: 2368 Colony Forming Units. Mean Particle Size: 2.7  $\mu\text{m}$  \*Particle size: 0.1  $\mu\text{m}$ .

Note: The data shown above represent typical values at the time of publication. These are not specifications.



1 Diameter



Apparel icon legend:  
page 4

Size	Color	Cat. No.	Case of
<b>Latex-Free</b>			
Small	White	414005-000	1000
Large	White	414005-001	1000

#### Bouffant cap dimensions

Size	S	L
Diameter, Relaxed (1)	8"	8½"
Diameter, Stretched (1)	21"	24"



Apparel icon legend:  
page 4

Color	Cat. No.	Case of
<b>With Ear Loops</b>		
Blue	414004-662	500
Green	414004-663	500
Yellow	414004-665	500
Pink	414004-664	500
<b>With Ties</b>		
Blue	414004-666	500



#### Three layers of protection

- Outer layer: 28 g/m² nonwoven polypropylene
- Filter media: 20 g/m² meltblown polypropylene
- Inner layer: 18 g/m² nonwoven polypropylene

VWR® ADVANCED PROTECTION HOODS AND SLEEVES

- Durable fabric with excellent breathability and water vapor transmission rate
- Significant fluid and particulate barrier: 99.9% bacterial filtration efficiency
- Particle shedding: Level II Helmke Drum Classification
- Soft, cloth-like fabric

VWR® ADVANCED PROTECTION HOODS



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White		
Universal	414004-503	125

Hood dimensions

Size	Universal	Small
Height (1)	18"	16 ½"
Top Width (2)	7"	11"
Bottom Width (3)	17½"	12"
Opening Width, Relaxed (4)	5"	2 ¾"
Opening Width, Stretched (4')	9¾"	—
Opening Height, Relaxed (5)	6½"	13 ¾"
Opening Height, Stretched (5')	9¾"	16 ¾"
Tie Length (6)	17"	—



- 1 Height  
2 Top  
3 Opening Width

VWR® ADVANCED PROTECTION SLEEVES

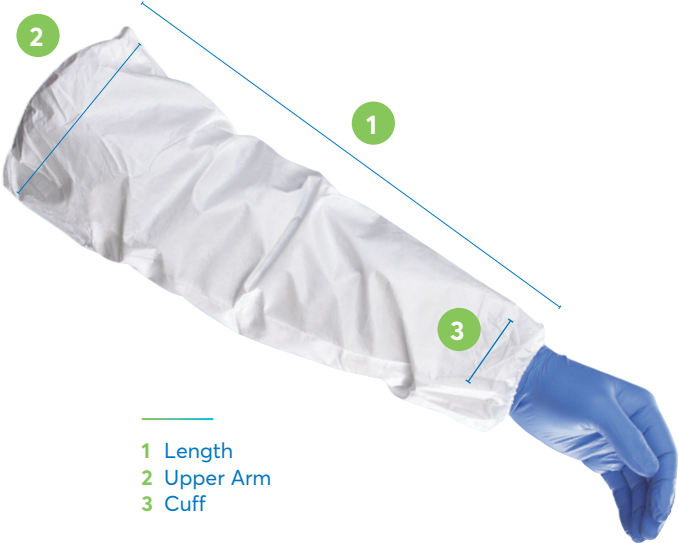


Apparel icon legend:  
page 4

Size	Cat. No.	Case of
Elastic Cuff		
Universal	414004-421	300
X-Large	414004-420	300
Thumb Loop		
Universal	76169-442	300
X-Large	76169-444	300
Knit Cuff		
X-Large	89208-810	300

Sleeve dimensions

Size	Universal	XL
Length (1)	19½"	21½"
Upper Arm, Relaxed (2)	4½"	5"
Upper Arm, Stretched (2)	9¾"	10½"
Cuff, Relaxed (3)	3¼"	3½"
Cuff, Stretched (3)	5¾"	6"

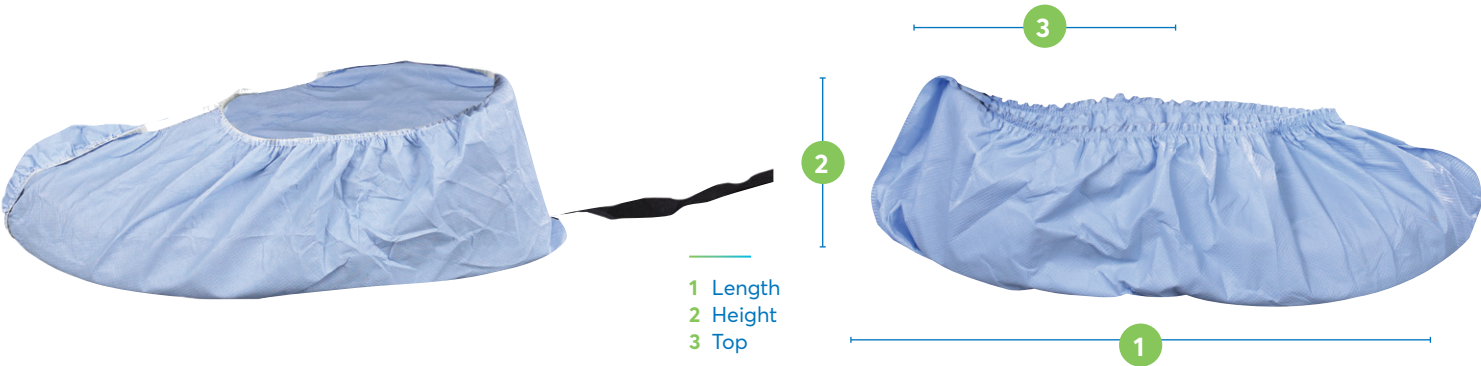


- 1 Length  
2 Upper Arm  
3 Cuff

VWR® ADVANCED PROTECTION ANTI-SKID SHOE COVERS

- Excellent particulate barrier: >99.9% bacterial filtration efficiency
- High coefficient of friction to provide excellent traction
- Non-linting

VWR® Advanced Protection Anti-Skid Shoe Covers are manufactured from a specially formulated PP/PE (polypropylene/polyethylene) microporous film that provides excellent fluid and barrier protection. These highly durable shoe covers ensure long-lasting abrasion and skid resistance and feature serged seams.



VWR® ADVANCED PROTECTION ANTI-SKID SHOE COVERS



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
Blue		
Universal	414004-649	300
Universal	414004-498	9000
X-Large	414004-650	300
X-Large	414004-499	9000
2X-Large	414004-651	300
2X-Large	414004-500	9000
Blue, Static Dissipative		
Universal	414004-644	300
X-Large	414004-645	300

Standard Shoe Cover dimensions

Size	Universal	XL	2X
Length (1)	15½"	17"	18½"
Height (2)	6¼"	6¾"	7"
Top, Relaxed (3)	4½"	5"	5½"
Top, Stretched (3)	9½"	11½"	12½"

Static Dissipative Shoe Cover dimensions

Size	Universal	XL
Length (1)	15½"	17"
Height (2)	7"	7"
Top, Relaxed (3)	4½"	5"
Top, Stretched (3)	10"	11¼"

Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level I	IEST-RP-CC003.3
Weight (g/m²)	51.53	ASTM D3776
Wyzenbeek Abrasion Mass Loss	0.92%	200 Rubs Using Zero Grade Emery Paper
Mullen Bursting Strength (Avg. PSI)	17.6	ASTM D3786
Tensile Strength (Avg. lbs./in.)		
Warp	26.6	ASTM D5034
Filling	24.9	
Trapezoid Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	11.7	ASTM D4533
Widthwise Yarns	16.4	
Barrier Properties		
Bacterial Filtration Efficiency (28.3L/min, 1CFM)	>99.9%	ASTM F2101
Water Resistance	Pass	AATCC Method 42
Skid-Resistance Properties		
Coefficient of Friction (COF)		
Kinetic COF	1.69	ASTM D1894
Static COF	0.84	

# VWR® Maximum Protection

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LIGHT CHEMICAL SPLASH RESISTANCE

BREATHABLE

MAXIMUM TEAR STRENGTH



## VWR® MAXIMUM PROTECTION COVERALLS, LAB COATS AND FROCKS

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

VWR® Maximum Protection Coveralls, Lab Coats and Frockes are designed for superior particle hold out without compromising breathability. Manufactured from a specially formulated breathable microporous fabric, these garments have been engineered to optimize comfort and barrier protection. Recommended for ISO 5 or higher.

### Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level I	IEST-RP-CC003.3
Weight (g/m²)	63	ASTM D3776
Thickness (mm)	0.22	ASTM D1777
Tensile Strength (Avg. lbs./in.)		
Warp	25.2	ASTM D5034
Filling	29.4	
Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	4.8	ASTM D2261
Widthwise Yarns	5.7	
Barrier Properties		
Bacterial Filtration Efficiency*	99.9%	ASTM F2101
Water Resistance	Pass	AATCC Method 42
Synthetic Blood Penetration Resistance	Pass	ASTM F1670-08
Test Item	Result	Test Standard
Comfort Properties		
Water Vapor Transmission Rate (Avg. g/m²/24 hrs.)†	733	ASTM E96
Delta P Breathability (mmH₂O/cm²)	>102	MIL-M-36954C
Air Permeability (cu. ft./min./sq. ft.)	0.06	ASTM D737
Chemical Resistance		
Sulfuric Acid (70% Concentration)	Pass	ASTM F903
Phosphoric Acid (85% Concentration)	Pass	
Hydrochloric Acid (37% Concentration)	Fail	
Household Bleach (100% Concentration)	Pass	

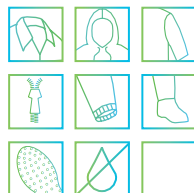
\*Control Average: 2928 CFU. †Procedure B, Water Method, 73.4 °F 50% Rh; Air Gap: ¼".

### Coverall dimensions

Size	M	L	XL	2X	3X	4X	5X
Body (1)	37½"	38¾"	40"	40½"	43"	43"	43½"
Chest (2)	24¼"	25"	27"	29¾"	32"	32½"	33½"
Sleeve (3)	34"	34"	36½"	37"	38"	41"	42"
Leg (4)	28½"	29½"	30"	31"	32"	32½"	33"



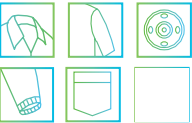
- 1 Body  
2 Chest  
3 Sleeve  
4 Leg



Apparel icon legend:  
page 4

## VWR® MAXIMUM PROTECTION COVERALLS

Size	Cat. No.	Case of
<b>White, Serged Seams</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, Serged Seams, 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
<b>White, Hooded, Serged Seams with Attached Fluid-Impervious Boot Covers</b>		
Small	76311-056	25
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, Bonded Seams, with Attached PVC Bootcovers</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



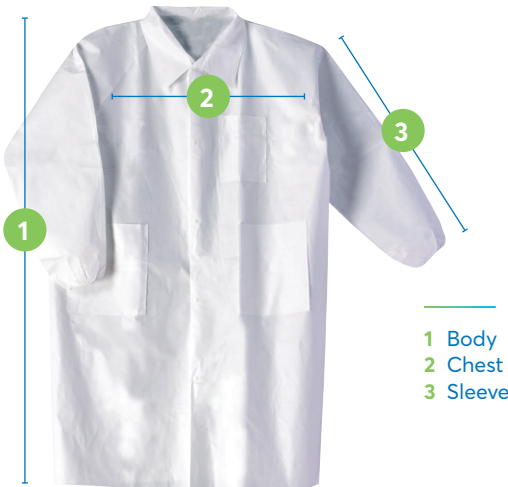
Apparel icon legend:  
page 4

VWR® MAXIMUM  
PROTECTION LAB COATS

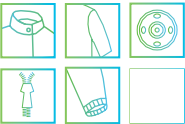
Size	Cat. No.	Case of
White		
Small	414004-373	25
Medium	414004-371	25
Large	414004-369	25
X-Large	414004-368	25
2X-Large	414004-370	25
3X-Large	414004-372	25
4X-Large	414004-374	25
5X-Large	414004-703	25

Lab Coat dimensions

Size	S	M	L	XL	2X	3X	4X	5X
Body (1)	36¾"	39½"	40"	42¾"	43½"	44½"	46½"	47½"
Chest (2)	24¼"	25¼"	27"	27¾"	29½"	30¾"	31½"	33"
Sleeve (3)	30"	30¼"	32½"	33"	37½"	38¼"	39¼"	42½"



Lab Coats



Apparel icon legend:  
page 4

VWR® MAXIMUM  
PROTECTION FROCKS

Size	Cat. No.	Case of
White, Snap Closure		
Medium	414004-399	25
Large	414004-397	25
X-Large	414004-395	25
2X-Large	414004-394	25
3X-Large	414004-398	25
4X-Large	414004-396	25
5X-Large	414004-702	25
White, Zipper Closure		
Medium	414004-696	25
Large	414004-697	25
X-Large	414004-698	25
2X-Large	414004-699	25
3X-Large	414004-700	25
4X-Large	414004-701	25

Hood dimensions

Size	S	M	L	XL	2X	3X	4X	5X
Body (1)	40½"	42½"	43½"	46"	47½"	51½"	52½"	53½"
Chest (2)	21¾"	22¾"	23½"	24¾"	26½"	29"	30½"	31½"
Sleeve (3)	33½"	34½"	35½"	36½"	37½"	40"	41"	42"



Frocks

VWR® MAXIMUM PROTECTION GOWNS MADE WITH FLUID-IMPERVIOUS FABRIC

- Provide full protection from fluids and light chemical splash
- Impervious material: >99.9% bacterial filtration efficiency
- Lowest level of particle shedding: Level I Helmke Drum Classification
- Clean, low linting fabric

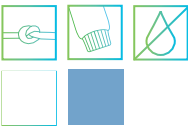
VWR® Maximum Protection Gowns are manufactured from specially formulated PP/PE (polypropylene/polyethylene) microporous film that provides excellent fluid and barrier protection. These fluid-impervious garments have been engineered to optimize barrier protection, cleanliness, abrasion resistance and comfort.

Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level I	IEST-RP-CC003.3
Weight (g/m²)	58.58	ASTM D3776
Wyzenbeek Abrasion Mass Loss	6.17%	200 Rubs Using Zero Grade Emery Paper
Mullen Bursting Strength (Avg. PSI)	18.0	ASTM D3786
Tensile Strength (Avg. lbs./in.)		
Warp	24.4	ASTM D5034
Filling	20.3	
Trapezoid Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	7.7	ASTM D4533
Widthwise Yarns	13.7	
Barrier Properties		
Bacterial Filtration Efficiency (28.3L/min, 1CFM)	>99.9%	ASTM F2101
Water Resistance	Pass	AATCC Method 42



- 1 Body
- 2 Chest
- 3 Sleeve
- 4 Waist Tie Length
- 5 Neck Tie Length



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White		
Medium	414004-681	50
Large	414004-470	50
X-Large	414004-471	50
4X-Large	414004-682	50
Blue		
Large	414004-469	50

Gown dimensions

Size	M	L	XL	4XL
Body (1)	41¼"	45"	47¼"	53½"
Chest (2)	23"	27"	30"	39"
Sleeve (3)	22½"	23"	24¾"	26¾"
Waist Tie Length 4)	29½"	29½"	29½"	40"
Neck Tie Length (5)	11"	11"	11"	15"

## VWR® Maximum Protection Masks

- Three-ply masks provide superior protection against bacteria and particulates
- Highly breathable and fluid-resistant
- Malleable noseband ensures custom, secure seal

VWR® Maximum Protection Masks feature three-ply construction for superior particle and bacterial filtration efficiency. These latex-free masks are available with spandex ear loops or polypropylene ties, ultrasonically welded to maintain softness and protect against particulates. A full-length plastic arch within the mask's protective layers holds the fabric away from the wearer's mouth to allow cooler, more comfortable breathing without restricting downward vision. An encased, 12 cm (4¾") malleable steel noseband creates a secure facial seal and improves comfort. Packaged 50 masks per pack, 10 packs per case. Cleanroom masks are packaged 50 masks per cleanroom-compatible, heat-sealed bag, 10 bags per case. Mask dimensions: 17.5L x 9.5H cm (6⅞ x 3¾"). Eyeshield dimensions: 30L x 13.5H cm (11⅓ x 5⅝").

Antifog masks feature soft, 20 mm wide foam strip to collect moisture and prevent protective eyewear from fogging. Mask with eyeshield features ultrasonically welded PET (polyethylene terephthalate) eyeshield for distortion-free vision and to guard against fluid splash. Cleanroom Masks feature low particle shedding. Moisture Resistant Cleanroom Masks feature a unique, lightweight inner layer of film for enhanced moisture resistance. Masks are rigorously tested and manufactured in an ISO Certified facility under stringent process controls to ensure that each product meets exacting quality standards.

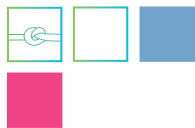


### Material properties

Test Item	Result	Test Standard
<b>Barrier Properties</b>		
Bacterial Filtration Efficiency* (%)w	>99	ASTM F2101
Particle Filtration Efficiency* (%)	>99	ASTM F2299
<b>Comfort Property</b>		
Delta P Breathability (mmH <sub>2</sub> O/cm <sup>2</sup> )	2.1–2.3	MIL-M-36954C

\*Control Average: 2368 Colony Forming Units. Mean Particle Size: 2.7 µm \*Particle size: 0.1 µm.  
Note: The data shown above represent typical values at the time of publication. These are not specifications.

## VWR® Maximum Protection Masks



Apparel icon legend:  
page 4

Color	Cat. No.	Case of
<b>With Ear Loops</b>		
Blue	414004-670	500
Pink	414004-672	500
White*	414004-673	500
<b>With Ties</b>		
Blue	414004-675	500

\*Pigment- and dye-free.

## VWR® Maximum Protection Antifog Masks



Apparel icon legend:  
Page 4

Color	Cat. No.	Case of
Blue	414004-676	500
White*	414004-677	500

\*Pigment- and dye-free.

## VWR® Maximum Protection Antifog Masks with Eye Shield



Apparel icon legend:  
Page 4

Color	Cat. No.	Case of
Blue	414004-678	200



### Three layers of protection

- Outer layer: 28 g/m<sup>2</sup> nonwoven polypropylene
- Filter media: 25 g/m<sup>2</sup> meltblown polypropylene
- Inner layer: 21 g/m<sup>2</sup> thermally bonded nonwoven polypropylene

## VWR® MAXIMUM PROTECTION CLEANROOM MASKS

### Material properties

Test Item	Result	Test Standard
<b>Physical Property</b>		
Particle Shedding (Particles: $\geq 0.5\mu\text{m}/\text{cu. ft.}$ )	196	IEST-RP-CC003.3
<b>Barrier Properties</b>		
Bacterial Filtration Efficiency* (%)	>99	ASTM F2101
Particle Filtration Efficiency* (%)	>99	ASTM F2299
<b>Comfort Property</b>		
Delta P Breathability ( $\text{mmH}_2\text{O}/\text{cm}^2$ )	1.9–2.2	MIL-M-36954C

\*Control Average: 2368 Colony Forming Units. Mean Particle Size:  $2.7\mu\text{m}$  \*Particle size:  $0.1\mu\text{m}$ .  
Note: The data shown above represent typical values at the time of publication.  
These are not specifications.

## VWR® MAXIMUM PROTECTION MOISTURE-RESISTANT CLEANROOM MASK



Apparel icon legend:  
page 4

Color	Cat. No.	Case of
<b>With Ear Loops</b>		
White*	414004-668	500
Blue	414004-667	500
<b>With Ties</b>		
White*	414004-669	500

\*Pigment- and dye-free.



### Three layers of protection

- Outer layer:  $21\text{ g/m}^2$  thermally bonded nonwoven polypropylene
- Filter Media:  $25\text{ g/m}^2$  meltblown polypropylene
- Inner layer:  $24\text{ g/m}^2$  film

## VWR® MAXIMUM PROTECTION ANTIFOG FULL FACE SHIELDS

- Protect front and sides of face from fluid splash
- Low-glare, optically clear PET shield allows distortion-free vision

VWR® Maximum Protection Antifog Full Face Shields provide total facial splash protection and can be worn for extended periods. Manufactured from PET (polyethylene terephthalate), these latex-free face shields feature an antifog coating and fit easily over eyewear. A soft, polyurethane foam sponge fits snugly against the forehead. Packaged 10 face shields per pack, five packs per box, four boxes per case. Dimensions:  $33.5\text{L} \times 21\text{H cm}$  ( $13\frac{3}{16} \times 8\frac{5}{8}$ ").

### Material properties

Test Item	Result	Test Standard
Thickness (mm)	$0.18 \pm 0.02$	ASTM D1777

## VWR® MAXIMUM PROTECTION ANTIFOG FULL FACE SHIELDS

Head Band	Cat. No.	Case of
Elastic	414004-679	200
Velcro	414004-866	200

### Face shield dimensions

Height (1)	Length (2)	Sponge Height (3)
$8\frac{5}{8}"$	$13\frac{3}{16}"$	1"

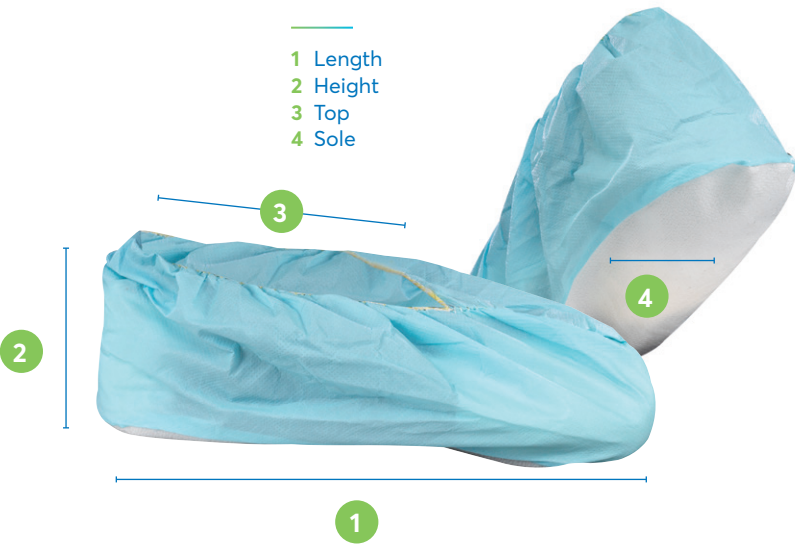


- 1 Height
- 2 Length
- 3 Sponge Height

VWR® MAXIMUM PROTECTION  
NON-SKID SHOE COVERS

- Non-skid sole provides maximum traction on wet and smooth surfaces
- Superior coefficient of friction
- Impervious material: >99.9% bacterial filtration efficiency
- Clean, low-linting fabric

VWR® Maximum Protection Non-Skid Shoe Covers are the cleanest and most durable within the entire VWR Protection line of apparel. These shoe covers feature serged seams and have been engineered to optimize skid resistance, barrier protection, cleanliness and comfort.



Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level I	IEST-RP-CC003.3
Weight (g/m²)	58.58	ASTM D3776
Wyzenbeek Abrasion Mass Loss	6.17%	200 Rubs Using Zero Grade Emery Paper
Mullen Bursting Strength (Avg. PSI)	18.0	ASTM D3786
Abrasion Resistance of Shoe Cover Sole (Avg. cycles at which fabric shows noticeable wear)	1000	ASTM D3884 (H-18 Wheel, 500g Load)
Tensile Strength (Avg. lbs./in.)		
Warp	24.4	ASTM D5034
Filling	20.3	
Trapezoid Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	7.7	ASTM D4533
Widthwise Yarns	13.7	
Barrier Properties		
Bacterial Filtration Efficiency (28.3L/min., 1CFM)	>99.9%	ASTM F2101
Water Resistance	Pass	AATCC Method 42
Skid-Resistance Properties		
Coefficient of Friction (COF)		
Kinetic COF	3.54	ASTM D1894
Static COF	2.88	



Apparel icon legend:  
Page 4

Size	Cat. No.	Case of
Blue		
Universal	414004-486	200
Medium	414004-488	200
Large	414004-489	200
X-Large	414004-487	200
White		
Universal	414004-480	200
Small	414004-857	200
Medium	414004-482	200
Large	414004-483	200
X-Large	414004-481	200

Shoe cover dimensions

Size	Universal	S	M	L	XL
Length (1)	14"	10"	11½"	12¾"	15¼"
Height (2)	5"	4¼"	5"	5"	6½"
Top, Relaxed (3)	5"	3¾"	4½"	4¾"	6½"
Top, Stretched (3)	10½"	7½"	8¾"	9¼"	12"
Sole Width (4)	4½"	4¼"	4¼"	4½"	4¾"

VWR® MAXIMUM PROTECTION  
HIGH-TACK SHOE COVERS

- Sonically welded seams
- Superior fluid and barrier protection
- Ideal for wet surfaces

VWR® Maximum Protection High-Tack Shoe Covers are manufactured from specially formulated 100 gsm polyurethane material that grip the walking surface to prevent the possibility of slipping. These shoe covers are fully heat sealed preventing any liquids from penetrating. Bulk packed in large poly bag with case liner.

Material properties

Test Item	Result	Test Standard
Physical Properties		
Weight (g/m²)	106.86	ASTM D3776
Mullen Bursting Strength (Avg. PSI)	24.0	ASTM D3786
Trapezoid Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	4.1	ASTM D4533
Widthwise Yarns	13.2	
Skid-Resistance Properties		
Coefficient of Friction (COF)		
Kinetic COF	0.85	ASTM D1894
Static COF	3.63	



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
Blue		
Universal	414005-083	300
X-Large	414005-084	300

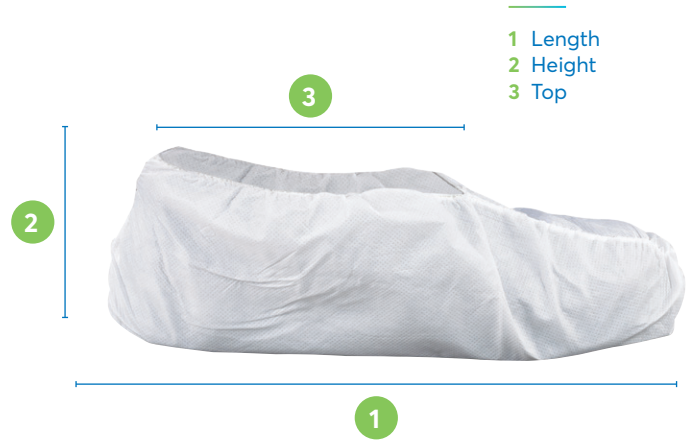
Shoe cover dimensions

Size	Universal	XL
Length (1)	15½"	17"
Height (2)	6½"	7"
Top, Relaxed (3)	4½"	5"
Top, Stretched (3)	10½"	11"

## VWR® MAXIMUM PROTECTION FLUID-IMPERVIOUS BUTTERFLY-STYLE SHOE COVERS

- Fluid-impervious material with seamless bottom to repel water
- Skid resistance on wet and smooth surfaces
- Excellent particulate barrier
- Low-linting
- Serged seams

VWR® Maximum Protection Fluid-Impervious Butterfly-Style Shoe Covers are the cleanest and most durable within the entire VWR Protection line of apparel.



### Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level I	IEST-RP-CC003.3
Weight (g/m²)	60.75	ASTM D3776
Wyzenbeek Abrasion Mass Loss	1.55%	200 Rubs Using Zero Grade Emery Paper
Mullen Bursting Strength (Avg. PSI)	26.0	ASTM D3786
Tensile Strength (Avg. lbs./in.)		
Warp	38.6	ASTM D5034
Filling	31.0	
Trapezoid Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	15.5	ASTM D4533
Widthwise Yarns	24.5	
Barrier Properties		
Bacterial Filtration Efficiency (28.3L/min, 1CFM)	99.9%	ASTM F2101
Water Resistance	Pass	AATCC Method 42
Skid-Resistance Properties		
Coefficient of Friction (COF)		
Kinetic COF	1.71	ASTM D1894
Static COF	0.57	



Apparel icon legend:  
Page 4

Size	Cat. No.	Case of
<b>White</b>		
Universal	414004-646	150
X-Large	414004-647	150
2X-Large	414004-648	150
<b>Blue</b>		
Universal	414004-641	150
X-Large	414004-642	150
2X-Large	414004-643	150

### Shoe cover dimensions

Size	Universal	XL	2XL
Length (1)	15½"	17"	19"
Height (2)	6½"	7"	7¼"
Top, Relaxed (3)	4½"	5"	5½"
Top, Stretched (3)	10½"	11"	13"



VWR® MAXIMUM PROTECTION NON-SKID  
HIGH-TOP BOOT COVERS

- Non-skid sole provides maximum traction on wet and smooth surfaces
- Superior coefficient of friction
- Excellent fluid and particulate barrier: >99.9% bacterial filtration efficiency
- Breathable to ensure user comfort
- Soft, cloth-like fabric with maximum tear strength

VWR® Maximum Protection Non-Skid High-Top Boot Covers are the cleanest and most durable within the entire VWR Protection line of apparel. These boot covers have been engineered to optimize skid-resistance, barrier protection, cleanliness and comfort.

Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level I	IEST-RP-CC003.3
Weight (g/m²)	63	ASTM D3776
Thickness (mm)	0.22	ASTM D1777
Tensile Strength (Avg. lbs./in.)		
Warp	25.2	ASTM D5034
Filling	29.4	
Trapezoid Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	4.8	ASTM D2261
Widthwise Yarns	5.7	
Barrier Properties		
Bacterial Filtration Efficiency*	>99.9%	ASTM F2101
Water Resistance	Pass	AATCC Method 42
Synthetic Blood Penetration Resistance	Pass	ASTM F1670-08
Skid-Resistance Properties		
Coefficient of Friction (COF)		
Kinetic COF	3.54	ASTM D1894
Static COF	2.88	
Chemical Resistance		
Sulfuric Acid (70% Concentration)	Pass	ASTM F903
Phosphoric Acid (85% Concentration)	Pass	
Hydrochloric Acid (37% Concentration)	Fail	
Household Bleach (100% Concentration)	Pass	

\*Control Average: 2928 CFU.



Apparel icon legend:  
page 4

Size	Cat.No.	Case of
Without Ankle Ties		
Universal	414004-414	200
Medium	414004-417	200
X-Large	414004-415	200
With Ankle Ties		
Universal	414004-418	200
Medium	414004-416	200
X-Large	414004-419	200

Standard boot cover dimensions

Size	Universal	M	XL
Length (1)	14"	11¼"	15"
Height (2)	17½"	17"	18"
Top, Relaxed (3)	5¾"	5¼"	6"
Top, Stretched (3)	9½"	9"	11½"
Ankle, Relaxed (4)	6½"	6"	6¾"
Ankle, Stretched (4)	11"	9¾"	12½"
Sole Width (5)	4½"	4¼"	4¾"

Ankle tie boot cover dimensions

Size	Universal	M	XL
Length (1)	14"	11¼"	15"
Height (2)	18½"	18"	19"
Top, Relaxed (3)	5¼"	4½"	5"
Top, Stretched (3)	11½"	9"	12½"
Tie Length (4)	17"	17"	17"
Sole Width (4)	4½"	4¼"	4¾"

## VWR® MAXIMUM PROTECTION FLUID-IMPERVIOUS ANKLE-HIGH BOOT COVERS

- Fluid-impervious material with seamless bottom to repel water
- Skid resistance on wet and smooth surfaces
- Excellent particulate barrier
- Low-linting
- Serged seams

VWR® Maximum Protection Fluid-Impervious Ankle-High Boot Covers are the cleanest and most durable within the entire VWR Protection line of apparel. These boot covers have been engineered to optimize barrier protection, cleanliness and comfort.

### Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level I	IENT-RP-CC003.3
Weight (g/m²)	60.21	ASTM D3776
Wyzenbeek Abrasion Mass Loss	8.03%	200 Rubs Using Zero Grade Emery Paper
Mullen Bursting Strength (Avg. PSI)	23.6	ASTM D3786
Tensile Strength (Avg. lbs./in.)		
Warp	34.2	ASTM D5034
Filling	28.8	
Trapezoid Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	13.3	ASTM D4533
Widthwise Yarns	16.5	
Barrier Properties		
Bacterial Filtration Efficiency (28.3L/min, 1CFM)	99.9%	ASTM F2101
Water Resistance	Pass	AATCC Method 42
Skid-Resistance Properties		
Coefficient of Friction (COF)		
Kinetic COF	1.44	ASTM D1894
Static COF	0.68	



Apparel icon legend:  
page 4

Size	Color	Cat. No.	Case of
Universal	White	414004-640	200
X-Large	Blue	414004-638	200
2X-Large	Black	414004-639	200

### Hood dimensions

Size	Universal	XL	2XL
Length (1)	15"	16½"	18½"
Height (2)	11"	11"	11¼"
Top, Relaxed (3)	5"	5¼"	5½"
Top, Stretched (3)	9½"	10½"	11½"

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- Office Supplies
- Pneumatic Tools



# VWR® Irradiated Protection

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GAMMA IRRADIATED TO SAL  $10^{-4}$

DURABLE FABRIC

99.9% BACTERIAL FILTRATION EFFICIENCY



VWR® IRRADIATED 10<sup>-4</sup> COVERALLS AND FROCKS

- Gamma irradiated to a sterility assurance level (SAL) of 10<sup>-4</sup>
- Lowest level of particle shedding: Level I Helmke Drum Classification
- Durable fabric with excellent breathability and water vapor transmission rate
- 99.9% bacterial filtration efficiency
- Individually bagged

These irradiated coveralls and frocks are manufactured from a microporous fabric that provides significant fluid and barrier protection. Garments exhibit excellent water vapor transmission to optimize breathability and user comfort. Garments 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 double carton liner. Each case is supplied with a Certificate of Irradiation.



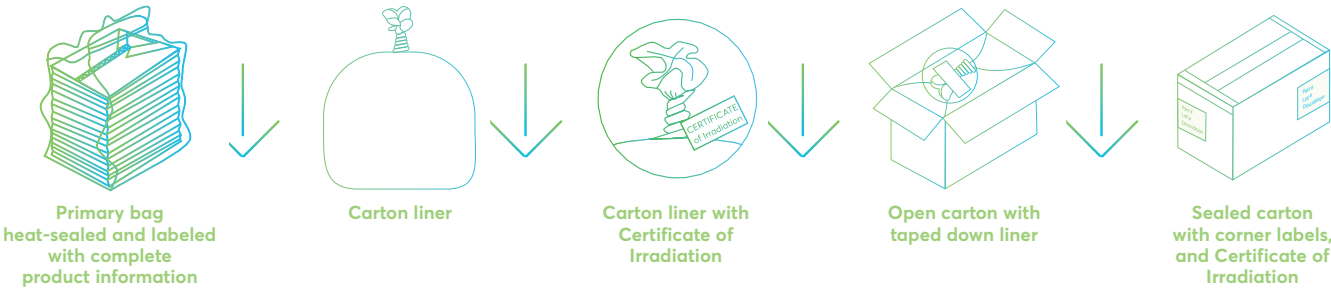
Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level I	IEST-RP-CC003.3
Weight (g/m²)	56	ASTM D3776
Thickness (mm)	0.21	ASTM D1777
Tensile Strength (Avg. lbs./in.)		
Warp	22	ASTM D5034
Filling	21	
Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	6.1	ASTM D2261
Widthwise Yarns	8.7	

Barrier Properties		
Bacterial Filtration Efficiency (28.3L/min.,1cfm)	99.9%	ASTM F2101
Water Resistance	Zero Penetration	AATCC Method 42
Synthetic Blood Penetration Resistance	Pass	ASTM F1670-08
Chemical Resistance		
Sulfuric Acid (70% Concentration)	Pass	ASTM F903
Phosphoric Acid (85% Concentration)	Pass	
Hydrochloric Acid (37% Concentration)	Fail	
Household Bleach (100% Concentration)	Fail	

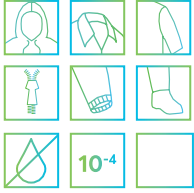
\*Procedure B, Water Method, 73.4°F 50% Rh; Air Gap: ¼".  
Certificates of Irradiation located on outside and inside of cartons.

IRRADIATED GARMENTS PACKAGING



Garments are packaged in a primary vacuum heat-sealed bag, carton liner and outer corrugated carton to assure bioburden and contamination does not migrate between environments. The outer carton has a Certificate of Irradiation with indicator dot eliminating the need to quarantine product while awaiting documentation. All open seams on the outer carton are tape sealed to further prevent contamination. Four-sided carton labeling

allows quick, easy identification and error-free inventory management. The twist-sealed carton liner has an additional Certificate of Irradiation with indicator dot. All garments are precision folded for easy donning and stacked within the primary heat-sealed bag to permit efficient storage with or without bins. The primary bag is clearly labeled with complete product information.

VWR® IRRADIATED 10<sup>-4</sup> COVERALLS

Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
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
4X-Large	89136-084	25
5X-Large	89136-086	25
<b>White, Hooded, with Attached Fluid-Impervious Boot Covers</b>		
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
4X-Large	89136-080	25
5X-Large	89136-082	25

## Coverall dimensions

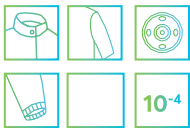
Size	S	M	L	XL	2X	3X	4X	5X
<b>Body (1)</b>	36½"	37½"	38¾"	40"	40½"	43"	43"	43½"
<b>Chest (2)</b>	23"	24¼"	25"	27"	29¾"	32"	32½"	33½"
<b>Sleeve (3)</b>	32½"	34"	34"	36½"	37"	38"	41"	42"
<b>Leg (4)</b>	28"	28½"	29½"	30"	31"	32"	32½"	33"

- 1 Body
- 2 Chest
- 3 Sleeve
- 4 Leg



Coveralls

## VWR® IRRADIATED FROCKS



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
Medium	414004-462	25
Large	414004-463	25
X-Large	414004-464	25
2X-Large	414004-465	25
3X-Large	414004-466	25
4X-Large	89136-088	25
5X-Large	89136-090	25

## Frock dimensions

Size	M	L	XL	2X	3X	4XL	5XL
<b>Body (1)</b>	42½"	43½"	46"	47½"	51½"	52½"	53½"
<b>Chest (2)</b>	22¾"	23½"	24¾"	26½"	29"	30½"	30"
<b>Sleeve (3)</b>	34½"	35½"	36½"	37½"	40"	41"	42"



- 1 Body
- 2 Chest
- 3 Sleeve

Frocks

VWR® IRRADIATED BOUFFANT CAPS AND BEARD COVERS

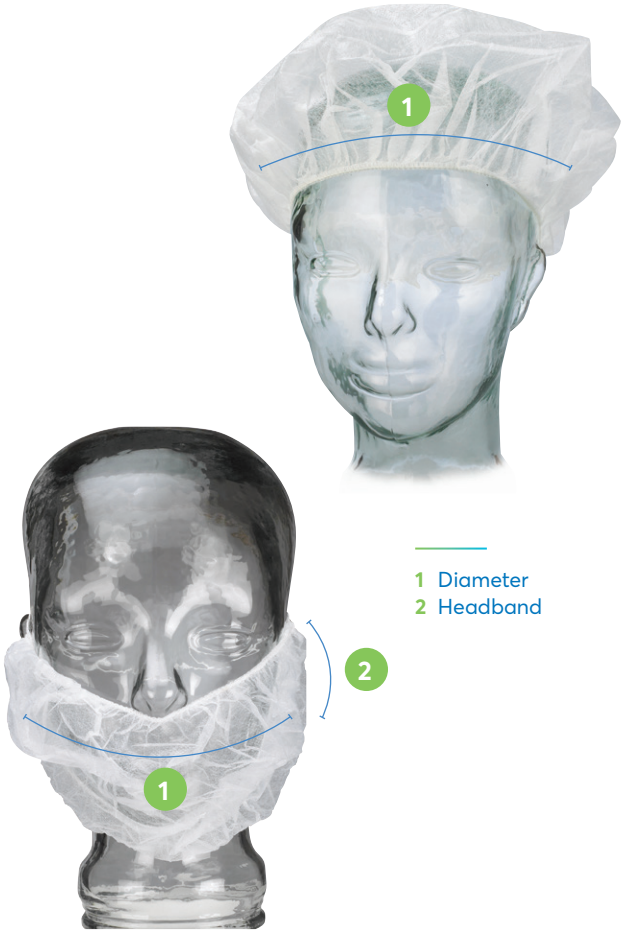
- Gamma irradiated to a sterility assurance level (SAL) of 10<sup>-4</sup>
- Lowest level of particle shedding: Level I Helmke Drum Classification
- First line barrier
- Non-linting

VWR® Irradiated Bouffant Caps and Beard Covers are manufactured from strong, lightweight and breathable spunbonded polypropylene (SPP) fabric, which protects against dirt, grime and certain dry particulates in nonhazardous environments. These products 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, bouffant caps are packed in sealed polyethylene bags, 10 per bag, contained within a larger carton liner. Each case is supplied with a Certificate of Irradiation.

Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level I	IEST-RP-CC003.3
Weight (g/m²)	16.82	ASTM D3776
Tensile Strength (Avg. lbs./in.)		
Warp	6.6	ASTM D5034
Filling	5.9	
Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	1.3	ASTM D2261
Widthwise Yarns	1.6	

Certificate of Irradiation located on inside and outside of cartons.



- 1 Diameter
- 2 Headband

VWR® IRRADIATED BOUFFANT CAPS



10<sup>-4</sup>

Apparel icon legend:  
page 4

Size	Cat. No.	Case of
Latex-Free		
Small	414004-504	1000
Large	414004-505	1000

Bouffant cap dimensions

Size	S	L
Diameter, Relaxed (1)	8"	8½"
Diameter, Stretched (1)	21"	24"

VWR® IRRADIATED BEARD COVERS



10<sup>-4</sup>

Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White		
Universal	414004-506	1000

Beard cover dimensions

Size	Universal
Diameter, Relaxed (1)	6"
Diameter, Stretched (2)	18"
Headband (3)	10"

## VWR® IRRADIATED HOODS

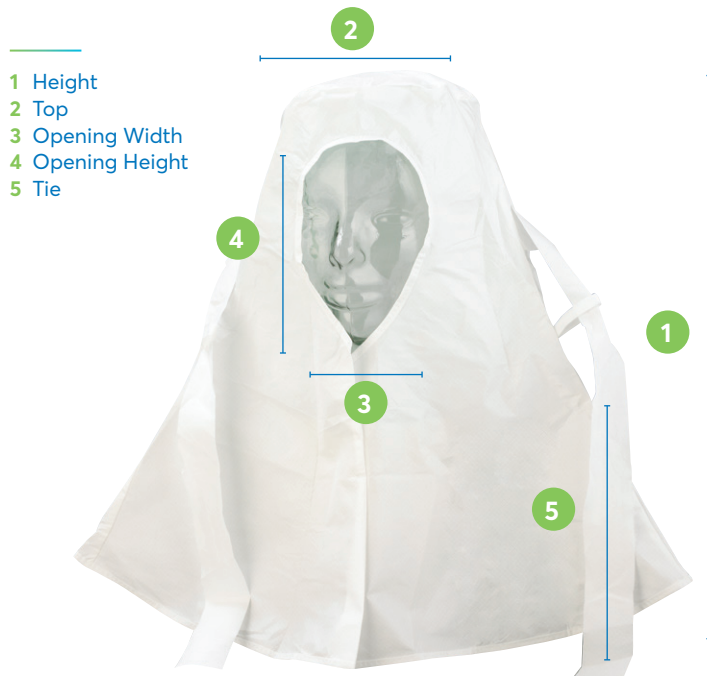
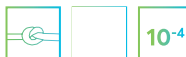
- Gamma irradiated to a sterility assurance level (SAL) of  $10^{-4}$
- Lowest level of particle shedding: Level I Helmke Drum Classification
- Durable fabric with excellent breathability and water vapor transmission rate
- Significant fluid and particulate barrier: 99.9% bacterial filtration efficiency
- Soft, cloth-like fabric

The VWR® Irradiated Hood is manufactured from a microporous fabric that provides significant fluid and barrier protection. Garment allows full range of motion and vision, and exhibits excellent water vapor transmission to optimize breathability and user comfort. Each hood is 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 double carton liner. Each case is supplied with a Certificate of Irradiation.

## Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level I	IEST-RP-CC003.3
Weight (g/m²)	56	ASTM D3776
Thickness (mm)	0.21	ASTM D1777
Tensile Strength (Avg. lbs./in.)		
Warp	22	ASTM D5034
Filling	21	
Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	6.1	ASTM D2261
Widthwise Yarns	8.7	
Barrier Properties		
Bacterial Filtration Efficiency (28.3L/min.,1cfm)	99.9%	ASTM F2101
Water Resistance	Zero Penetration	AATCC Method 42
Synthetic Blood Penetration Resistance	Pass	ASTM F1670-08
Comfort		
Water Vapor Transmission Rate (Avg. g/m²/24 hrs.)*	777	ASTM E96
Delta P Breathability (mmH₂O/cm²)	>102	MIL-M-36954C
Air Permeability (cu. ft./min./sq. ft.)	0.06	ASTM D737
Chemical Resistance		
Sulfuric Acid (70% Concentration)	Pass	ASTM F903
Phosphoric Acid (85% Concentration)	Pass	
Hydrochloric Acid (37% Concentration)	Fail	
Household Bleach (100% Concentration)	Fail	

\*Procedure B, Water Method, 73.4°F 50% Rh; Air Gap: ¼".  
Certificate of Irradiation located on inside and outside of cartons.

VWR® IRRADIATED  $10^{-4}$  HOODS

Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White		
Universal	414004-502	125

## Hood dimensions

Size	Universal
Height (1)	18"
Top Width (2)	7"
Bottom Width (3)	17½"
Opening Width, Relaxed (4)	5"
Opening Width, Stretched (4)	9¾"
Opening Height, Relaxed (5)	6½"
Opening Height, Stretched (5)	9¾"
Tie Length (6)	17"

VWR® IRRADIATED NON-SKID SHOE COVERS

- Gamma irradiated to a sterility assurance level (SAL) of 10-4
- Non-skid sole provides maximum traction on wet and smooth surfaces
- Superior coefficient of friction
- Impervious material: >99.9% bacterial filtration efficiency
- Clean, low-linting fabric

VWR® Irradiated Non-Skid Shoe Covers have been engineered to optimize skid resistance, barrier protection, cleanliness and comfort. These shoe covers 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/ M6.5) cleanroom, shoe covers are bulk packed in sealed polyethylene bags contained within a larger carton liner. Each case is supplied with a Certificate of Irradiation.

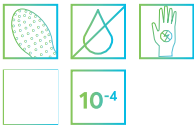
Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level I	IENT-RP-CC003.3
Weight (g/m²)	61.29	ASTM D3776
Wyzenbeek Abrasion Mass Loss	19.25%	200 Rubs Using Zero Grade Emery Paper
Mullen Bursting Strength (PSI)	25.4	ASTM D3786
Abrasion Resistance of Shoe Cover Sole (Avg. cycles at which fabric shows noticeable wear)	1000	ASTM D3884 (H-18 Wheel, 500g Load)
Tensile Strength (Avg. lbs./in.)		
Warp	24.4	ASTM D5034
Filling	20.3	
Trapezoid Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	7.7	ASTM D4533
Widthwise Yarns	13.7	
Barrier Properties		
Bacterial Filtration Efficiency (28.3L/min, 1CFM)	99.9%	ASTM F2101
Water Resistance	Pass	AATCC Method 42
Skid-Resistance Properties		
Coefficient of Friction (COF)		
Kinetic COF	3.54	ASTM D1894
Static COF	2.88	

Certificate of Irradiation located on inside and outside of cartons.



VWR® IRRADIATED NON-SKID SHOE COVERS



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White		
Medium	414004-478	200
Large	414004-479	200
Universal	414004-476	200
X-Large	414004-477	200

Shoe cover dimensions

Size	M	L	Universal	XL
Length (1)	11½"	12¾"	14"	15"
Height (2)	5"	5"	5"	5¾"
Top, Relaxed (3)	4"	4¾"	5"	5"
Top, Stretched (3)	8¾"	9¼"	10½"	11¾"
Sole Width (4)	4¼"	4½"	4½"	4¾"

## VWR® IRRADIATED NON-SKID HIGH-TOP BOOT COVER

- Gamma irradiated to a sterility assurance level (SAL) of  $10^{-4}$
- Non-skid sole provides maximum traction on wet and smooth surfaces
- Superior coefficient of friction
- Excellent fluid and particulate barrier: >99.9% bacterial filtration efficiency
- Breathable to ensure user comfort
- Soft, cloth-like fabric with maximum tear strength

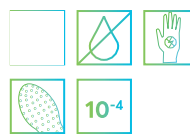
The VWR® Irradiated Non-Skid High-Top Boot Cover has been engineered to optimize skid resistance, barrier protection, cleanliness and comfort. This boot cover is gamma irradiated to address the concern of bio-burden contamination. Manufactured and packaged in an ISO Class 8 (FED-STD-209E Class 100,000/M6.5) cleanroom, boot covers are bulk packed in sealed polyethylene bags contained within a larger carton liner. Each case is supplied with a Certificate of Irradiation.

### Material properties

Test Item	Result	Test Standard
<b>Physical Properties</b>		
Particle Shedding (Helmke Drum)	Level I	TEST-RP-CC003.3
Weight (g/m <sup>2</sup> )	63	ASTM D3776
Thickness (mm)	0.22	ASTM D1777
<b>Tensile Strength (Avg. lbs./in.)</b>		
Warp	25.2	ASTM D5034
Filling	29.4	
<b>Tearing Strength (Avg. lbs./in.)</b>		
Lengthwise Yarns	4.8	ASTM D2261
Widthwise Yarns	5.7	
<b>Barrier Properties</b>		
Bacterial Filtration Efficiency*	>99.9%	ASTM F2101
Water Resistance	Pass	AATCC Method 42
Synthetic Blood Penetration Resistance	Pass	ASTM F1670-08
<b>Skid-Resistance Properties</b>		
<b>Coefficient of Friction (COF)</b>		
Kinetic COF	3.54	ASTM D1894
Static COF	2.88	
<b>Chemical Resistance</b>		
Sulfuric Acid (70% Concentration)	Pass	ASTM F903
Phosphoric Acid (85% Concentration)	Pass	
Hydrochloric Acid (37% Concentration)	Fail	
Household Bleach (100% Concentration)	Fail	

\*Control Average: 2928 CFU.

Certificates of Irradiation located on inside and outside of cartons.



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White		
X-Large	414004-501	200

### Boot Cover dimensions

Size	XL
Length (1)	15"
Height (2)	18"
Top, Relaxed (3)	6"
Top, Stretched (4)	11½"
Ankle, Relaxed (4)	6¾"
Ankle, Stretched (4)	12½"
Sole Width (5)	4¾"

# VWR® Sterile Protection

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GAMMA IRRADIATED TO SAL  $10^{-6}$

DURABLE FABRIC

COMFORTABLE



### VWR® STERILE COVERALLS, HOODS, SLEEVES AND BOOT COVERS

- Gamma irradiated to 10<sup>-6</sup> SAL
- Durable fabric
- Excellent breathability
- Individually bagged

VWR® sterile garment solutions consist of hoods, coveralls and boot covers that provide a solid option for customers requiring a functional garment program that is 10<sup>-6</sup> SAL. These comfortable garments are manufactured from a durable SMS fabric and feature bound seams.

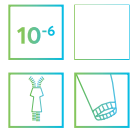
Snaps in the arms and legs of the garment enhance the ease of aseptic donning. The garments are rigorously tested and manufactured in an ISO Certified facility under stringent process controls to ensure that each product meets exacting quality standards and performs to specification. In addition, we also offer a very popular sterile sleeve to enhance protection.

Designed for performance in a variety of clean environments in multiple markets including compounding pharmacies and biopharmaceutical production.

Consult your  
VWR Controlled  
Environment  
Specialist for  
complete material  
property data



### VWR® STERILE COVERALLS, 10<sup>-6</sup> SAL



Apparel icon legend:  
page 4

Size	Cat. No.
<b>White</b>	
Small	89523-458
Medium	89523-460
Large	89523-462
X-Large	89523-464
2X-Large	89523-466
3X-Large	89523-468
4X-Large	89523-470
5X-Large	89523-472
6-8X Large	10853-872

#### Coverall dimensions

SIZE	1	B2	3*	4
S	64	26	21	24
M	66	26	21	25
L	68	27	21	26
XL	70	28	22	27
2XL	72	30	23	28
3XL	73	31	24	29
4XL	75	32	24	31
5XL	77	33	24	31
6-8XL	80	34	25	34
Tolerance±	1.2	1.2	0.8	0.8

\*C: relaxed elastic length in inches

### VWR® MAXIMUM PROTECTION STERILE DUCKBILL MASK WITH HOOD LOOPS

The new sterile duckbill mask with hood loops expands upon the VWR® mask types in the popular cleanroom Maximum Protection line by providing a sterile option.

- Three-ply masks, individually bagged
- Sterile 10<sup>-6</sup>, gamma sterilization
- Duckbill with hood loop configuration
- Natural, latex-free
- Low particle shedding



Description	Color	Sterility	Unit	Cat. No.
Duckbill Mask with Hood Loops	White	Sterile	Case of 200	76420-848

### VWR® MAXIMUM PROTECTION STERILE DUCKBILL MASK WITH TIES

The new sterile duckbill mask with ties expands upon the VWR® mask types in the popular cleanroom Maximum Protection line by providing a sterile option.

- Three-ply masks, individually bagged
- Sterile 10<sup>-6</sup>, gamma sterilization
- Duckbill with ties configuration
- Natural, latex-free
- Low particle shedding



Description	Color	Sterility	Unit	Cat. No.
Duckbill Mask with Ties	White	Sterile	Case of 200	76420-850

## VWR® MAXIMUM PROTECTION STERILE MASK WITH EAR LOOPS

The new sterile ear loop mask expands upon the VWR® mask types in the popular cleanroom Maximum Protection line by providing a sterile option.

- Three-ply masks
- Sterile 10<sup>-6</sup>, gamma sterilization
- Ear loop configuration
- Natural, latex-free
- Low particle shedding



Description	Unit	Cat. No.
Cleanroom Face Mask with Ear Loops	Case of 500	76420-852

## VWR® STERILE HOOD, 10<sup>-6</sup> SAL



Apparel icon legend:  
page 4

Size	Cat. No.
White	
Universal	89523-474



### Material properties

Application	Lab, Semiconductor, or Pharmaceutical Cleanroom
Bacterial Filtration Efficiency	> = 98%
Material	60 gsm SMS

## VWR® STERILE BOOT COVERS, 10<sup>-6</sup> SAL



Apparel icon legend:  
page 4

Size	Cat. No.
White	
Universal	10858-532
Medium	10858-530
X-Large	10858-534

### Material properties

	Test	Result	Test Standard
Physical Properties	Particle Shedding (Helmke Drum)	Level II	IEST-RP-CCOO3.3
	Surface Resistance (R(Ω)) for the sole	1.6x10 <sup>9</sup>	DIN 54345-1:1992
Skid-Resistance Properties	Coefficient of Friction (COF)	0.61	ASTM D1894-2001mod.
	Static COF		
	Kinetic COF	0.59	ASTM D1894-2001mod.
Barrier Property	Bacterial Filtration Efficiency (BFE) Staphylococcus aureus ATCC 6538*	98.6%	ASTM F2101-2014

\*Control average: 2054 (CFU)



## VWR® STERILE SLEEVES, 10<sup>-6</sup> SAL



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White with Sonically Welded Seams		
Universal	414004-510	300
X-Large	414004-511	300
White with Thumb Loop		
Universal	76169-446	300
X-Large	76169-448	300

### Sleeve dimensions

Size	Universal	XL
Length (1)	19½"	21½"
Upper Arm, Relaxed (2)	4½"	5"
Upper Arm, Stretched (2)	9¾"	10½"
Cuff, Relaxed (3)	3¾"	3½"
Cuff, Stretched (3)	5¾"	6"



# VWR® Signature Apparel

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DUPONT™ TYVEK® FLASHSPUN  
POLYETHYLENE FABRIC

SERGED SEAMS

ELASTIC WRISTS AND ANKLES



VWR® SIGNATURE™ COVERALLS, LAB COATS AND FROCKS  
MADE WITH DUPONT™ TYVEK® ISOCLEAN® MATERIAL

- DuPont™ Tyvek® flashspun polyethylene fabric
- Serged seams, laydown collar, set sleeves, zipper entry, elastic wrists and ankles
- Bulk packaged in double transparent poly liners

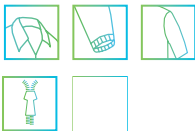
A VWR® garment made with DuPont™ Tyvek® delivers the ideal balance of protection, durability and comfort. Made using a patented flash spinning process, Tyvek features an excellent inherent barrier to dry particles, microorganisms and non-hazardous liquids. Every Tyvek IsoClean® garment is new, clean and fresh. Both inventory and use costs are predictable, allowing you to anticipate your costs without replacement, repair or restocking fees.

Material properties

Test Item	Result	Test Standard
Physical Properties		
Basis Weight (oz/yd²)	1.2	ASTM D3776
Thickness (mils)	5.4	ASTM D1777
Bacterial Filtration Efficiency (3.0 µm) (%)	99	ASTM F2101
Grab Tensile, MD (lbf)	18	ASTM 5034
Grab Tensile, CD (lbf)	25.5	ASTM 5034
Test Item	Result	Test Standard
Physical Properties		
Mullenburst (psi)	48	ASTM D774
Hydrostatic Head (cm H₂O)	100	AATCC TM127
Surface Resistivity (55% RH) (ohms)	6.3 x 109	ASTM D257
Flammability	Class 1	16 CFR 1610

All test results provided by independent third-party testing laboratories located in USA.  
For more information on material properties tests, turn to page 81.

VWR® SIGNATURE™ COVERALLS



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White		
Small	89012-822	25
Medium	89012-824	25
Large	89012-826	25
X-Large	89012-828	25
2X-Large	89012-830	25
3X-Large	89012-832	25
4X-Large	89012-834	25

Coverall dimensions

Size	Chest (1)	Sleeve (2)	Inseam (3)	Fits Chest	Fits Height
S	22¾"	32½"	27½"	32" to 36"	5' to 5'7"
M	24½"	33¾"	28"	36" to 38"	5'5" to 5'10"
L	25¾"	35"	29"	38" to 40"	5'8" to 6'
XL	27¼"	36½"	29½"	40" to 43"	5'11" to 6'3"
2X	28¾"	38¼"	30½"	43" to 46"	6'1" to 6'5"
3X	30¼"	38½"	31½"	46" to 52"	6'2" to 6'6"
4X	32"	39½"	32½"	52" to 58"	6'3" to 7'



- 1 Chest
- 2 Sleeve
- 3 Inseam

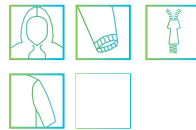


- 1 Chest
- 2 Sleeve
- 3 Inseam



- 1 Chest
- 2 Sleeve
- 3 Inseam

### VWR® SIGNATURE™ COVERALLS WITH HOOD



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
Medium	89012-812	25
Large	89012-814	25
X-Large	89012-816	25
2X-Large	89012-818	25
3X-Large	89012-820	25

#### Coverall dimensions

Size	M	L	XL	2X	3X
<b>Chest (1)</b>	24½"	25¾"	27¼"	28¾"	30¼"
<b>Sleeve (2)</b>	33¾"	35"	36½"	38¼"	38½"
<b>Inseam (3)</b>	28"	29"	29½"	30½"	31½"
<b>Fits Chest</b>	36" to 38"	38" to 40"	40" to 43"	43" to 46"	46" to 52"
<b>Fits Height</b>	5'5" to 5'10"	5'8" to 6'	5'11" to 6'3"	6'1" to 6'5"	6'2" to 6'6"

### VWR® SIGNATURE™ COVERALLS WITH ATTACHED BOOTS WITH GRIPPER™ SOLES



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
Medium	80200-620	25
Large	80200-622	25
X-Large	80200-624	25
2X-Large	80200-626	25
3X-Large	80200-628	25

### VWR® SIGNATURE™ COVERALLS WITH HOOD AND ATTACHED BOOTS WITH GRIPPER™ SOLES



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
Medium	89127-188	25
Large	89128-782	25
X-Large	89128-784	25
2X-Large	89128-778	25
3X-Large	89128-780	25

#### Coverall dimensions

Size	M	L	XL	2X	3X
<b>Chest (1)</b>	24½"	25¾"	27¼"	28¾"	30¼"
<b>Sleeve (2)</b>	33¾"	35"	36½"	38¼"	38½"
<b>Inseam (3)</b>	28"	29"	29½"	30½"	31½"
<b>Fits Chest</b>	36" to 38"	38" to 40"	40" to 43"	43" to 46"	46" to 52"
<b>Fits Height</b>	5'5" to 5'10"	5'8" to 6'	5'11" to 6'3"	6'1" to 6'5"	6'2" to 6'6"

## VWR® SIGNATURE™ LAB COATS WITH SNAP ENTRY



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
Small	89128-798	30
Medium	89125-786	30
Large	89128-786	30
X-Large	89127-198	30
2X-Large	89127-192	30

## VWR® SIGNATURE™ LAB COATS WITH RAGLAN SLEEVES



Apparel icon legend:  
page 4

Size.	Cat. No	Case of
<b>White</b>		
Small	89127-196	30
Medium	89125-612	30
Large	89127-194	30
X-Large	89125-614	30
2X-Large	89127-190	30

## Coat dimensions

Size	S	M	L	XL	2X
<b>Body (1)</b>	40½"	42"	43½"	45"	51"
<b>Chest (2)</b>	30¾"	22"	23"	24"	27½"
<b>Sleeve (3)</b>	30¾"	31¼"	32½"	33"	37¼"
<b>Fits Chest</b>	28" to 32"	32" to 36"	36" to 38"	38" to 40"	40" to 43"
<b>Fits Height</b>	4'9" to 5'2"	5' to 5'7"	5'5" to 5'10"	5'8" to 6'1"	5'11" to 6'3"

## VWR® SIGNATURE™ FROCKS WITH SNAP ENTRY



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
Small	80200-600	30
Medium	80200-602	30
Large	80200-604	30
2X-Large	80200-608	30
3X-Large	80200-610	30
4X-Large	80200-612	30

## VWR® SIGNATURE™ FROCKS WITH RAGLAN SLEEVES



Apparel icon legend:  
page 4

Size.	Cat. No	Case of
<b>White</b>		
Small	89128-788	30
Medium	89127-312	30
Large	89125-608	30
X-Large	89127-316	30
2X-Large	89127-308	30

## Frock dimensions

Size	S	M	L	XL	2X	3X	4X
<b>Body (1)</b>	39"	40"	41"	43"	44"	45"	46"
<b>Chest (2)</b>	24"	25"	26½"	27½"	29"	30"	31"
<b>Sleeve (3)</b>	34¾"	35½"	35¾"	37¾"	38¾"	39¾"	40¾"
<b>Fits Chest</b>	28" to 32"	32" to 36"	36" to 38"	38" to 40"	40" to 43"	43" to 46"	46" to 52"
<b>Fits Height</b>	4'9" to 5'2"	5' to 5'7"	5'5" to 5'10"	5'8" to 6'1"	5'11" to 6'3"	6'1" to 6'5"	6'2" to 6'6"



## VWR® SIGNATURE™ FROCKS WITH ZIPPER ENTRY

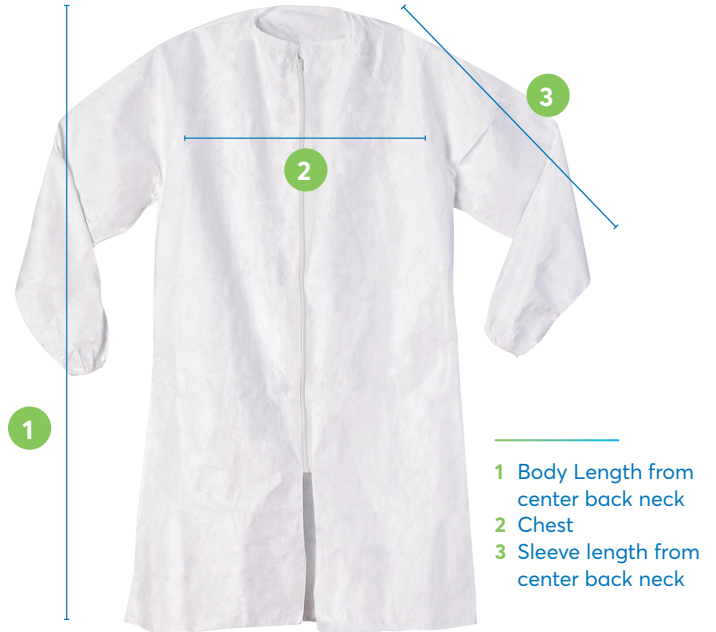


Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
Small	89128-788	30
Medium	89127-312	30
Large	89125-608	30
X-Large	89127-316	30
2X-Large	89127-308	30

### Frock dimensions

Size	S	M	L	XL	2X
<b>Body (1)</b>	41"	42¾"	45"	47"	53"
<b>Chest (2)</b>	23"	24"	25"	26"	30¾"
<b>Sleeve (3)</b>	34"	35½"	37½"	39¼"	42¾"
<b>Fits Chest</b>	28" to 32"	32" to 36"	36" to 38"	38" to 40"	40" to 43"
<b>Fits Height</b>	4'9" to 5'2"	5' to 5'7"	5'5" to 5'10"	5'8" to 6'1"	5'11" to 6'3"

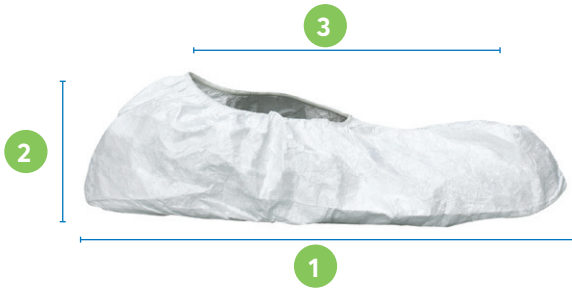


- 1 Body Length from center back neck
- 2 Chest
- 3 Sleeve length from center back neck

## VWR® SIGNATURE™ SHOE COVERS MADE WITH DUPONT™ TYVEK® ISOCLEAN® MATERIAL WITH GRIPPER™ SOLES

- DuPont™ Tyvek® flashspun polyethylene fabric with Gripper™ PVC soles
- Serged seams, elastic opening, white
- Bulk packaged in double transparent poly liners

VWR® shoe and boot covers with DuPont™ Gripper™ soles provide durable, slip-resistant solutions for your cleanroom apparel needs. The embossed polysole is made from highly engineered PVC material to prevent slipping and is combined with a coarsely textured interior, ensuring feet stay put on the inside as well as on the outside. Extra wide openings make for easy application.



- 1 Length
- 2 Height
- 3 Top

## VWR® SIGNATURE™ SHOE COVERS WITH GRIPPER™ SOLES



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
Medium	89128-792	100
Large	89128-794	100
X-Large	89128-790	100

### Shoe Cover dimensions

Size	M	L	XL
<b>Height (1)</b>	5"	5"	5"
<b>Length (2)</b>	11¾"	14"	16"
<b>Fits up to Men's Size</b>	7	14	18
<b>Fits up to Women's Size</b>	9	—	—

## VWR® SIGNATURE™ BOOT COVERS WITH GRIPPER™ SOLES



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
Medium	89013-154	100
Large	89013-156	100
X-Large	89013-158	100

### Boot Cover dimensions

Size	M	L	XL
<b>Height (1)</b>	18"	18"	18"
<b>Length (2)</b>	11¾"	14"	16"
<b>Fits up to Men's Size</b>	7	14	18
<b>Fits up to Women's Size</b>	9	—	—

# VWR® garment recycling solutions

Contact your  
VWR Sales Rep  
**FOR MORE  
INFORMATION**

- Comprehensive recycling solution to reduce landfill waste
- Drives sustainable business practices
- Multiple options available

This easy-to-use recycling program provides a complete waste collection, shipment and recycling solution for used disposable apparel. All brands of disposable apparel are accepted as long as they are clean and do not contain any contaminants.

This program offers a convenient opportunity to recycle an abundant source of waste found in nearly every large pharmaceutical production facility, diverting typically hard-to-recycle products into new permanent infrastructure including composite decking, railroad ties and drainage pipes.

## VWR® GARMENT RECYCLING SOLUTION

Description	Cat. No.	Unit
VWR Twelve-Pack Box Recycling Option	10127-400*	Pk./ 12
VWR Gaylord Recycling Option	470223-884	Each

\*This product is not available in Canada. Please contact your VWR Sales Reps for similar options available in your region.



# VWR® Reusable Apparel

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LAUNDERABLE

CUSTOM EMBROIDERY AVAILABLE

VARIOUS STYLES



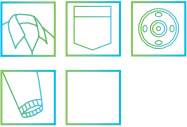
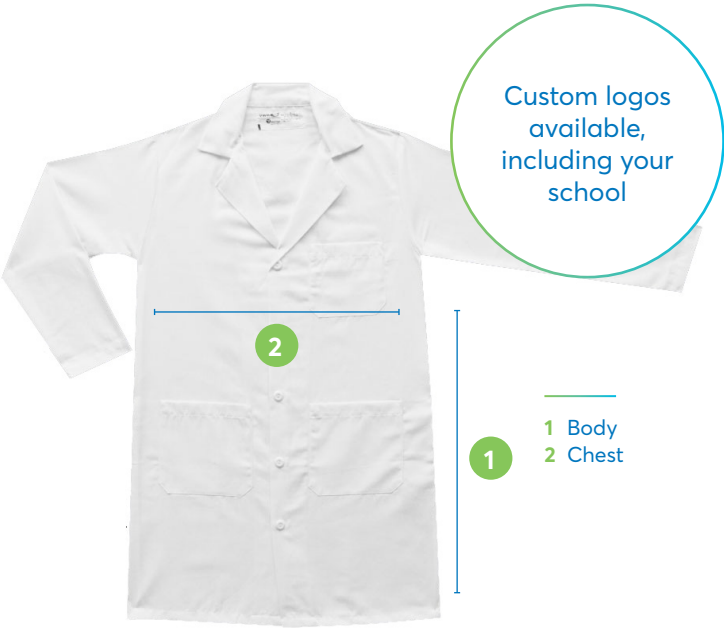
VWR® REUSABLE LAB COATS

- Snap front
- Industrial launderable
- Custom embroidery program
  - Customized logo
  - Embroidered name

These classic white lab coats are made with a soft, very durable 80/20 poly/cotton material that can stand up to industrial laundering. They feature stitched-down collars and three pockets (one breast pocket with a pencil slot, and two lower hip pockets). The front has five snaps and there are side vents to access pants pockets. The men's and women's have adjustable snap cuffs.

The women's coats feature a tapered back panel with a half belt. The unisex lab coats have knit cuffs for added sleeve protection.

Coats feature a plain front with no embroidery. Color: white



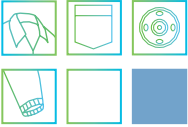
Apparel icon legend:  
page 4

VWR® REUSABLE POLY-BLEND  
LAB COATS, UNISEX

Size	Cat. No.	Case of
White		
X-Small	76048-766	25
Small	76048-768	25
Medium	76048-770	25
Large	76048-754	25
X-Large	76048-756	25
2X-Large	76048-764	25
3X-Large	76048-772	25
4X-Large	76048-774	25
5X-Large	76048-776	25

Reusable Lab Coat, Men's Unisex Dimensions

Size	XXS	XS	S	M	L	XL	2X	3X
Body (1)	39"	39"	39"	39"	39"	39"	39"	39"
Chest (2)	26-28"	30-32"	34-36"	38-40"	42-44"	46-48"	50-52"	54-56"

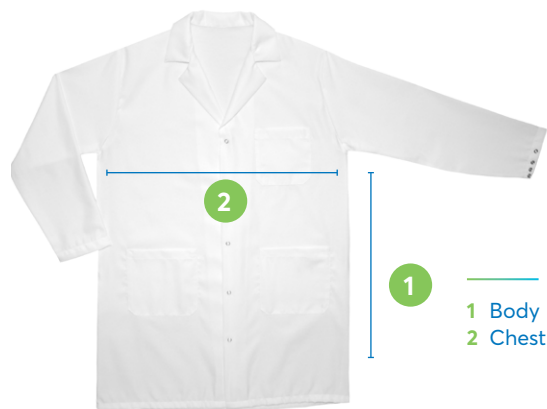


Apparel icon legend:  
page 4

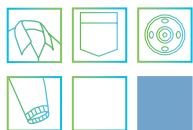
VWR® REUSABLE TECHNOLOGY  
LAB COATS, UNISEX

- Oversized hip pockets are large enough for a mini tablet

Size	Cat. No.	Case of
White		
2X-Small	10141-370	25
X-Small	10141-372	25
Small	10141-374	25
Medium	10141-342	25
Large	10141-344	25
X-Large	10141-346	25
2X-Large	10141-348	25
3X-Large	10141-350	25
Navy Blue		
2X-Small	75819-574	25
X-Small	75819-554	25
Small	75819-556	25
Medium	75819-558	25
Large	75819-560	25
X-Large	75819-562	25
2X-Large	75819-564	25
3X-Large	75819-566	25



### VWR® REUSABLE LAB COATS, MEN'S

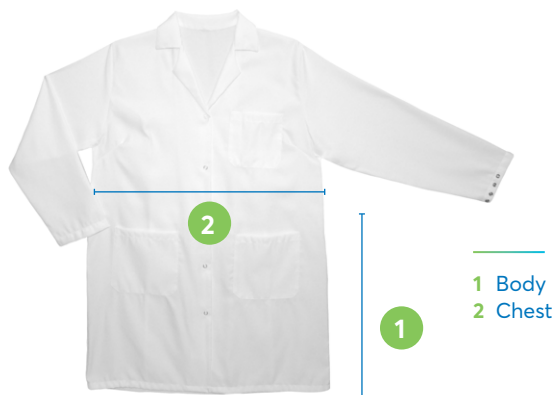


Apparel icon legend:  
page 4

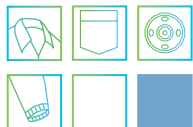
Size	Cat. No.	Case of
White		
Small	10141-300	25
Medium	10141-302	25
Large	10141-304	25
X-Large	10141-306	25
2X-Large	10141-308	25
3X-Large	10141-310	25

#### Reusable Lab Coat, Men's dimensions

Size	XXS	XS	S	M	L	XL	2X	3X
Body (1)	39"	39"	39"	39"	39"	39"	39"	39"
Chest (2)	26-28"	30-32"	34-36"	38-40"	42-44"	46-48"	50-52"	54-56"



### VWR® REUSABLE LAB COATS, WOMEN'S

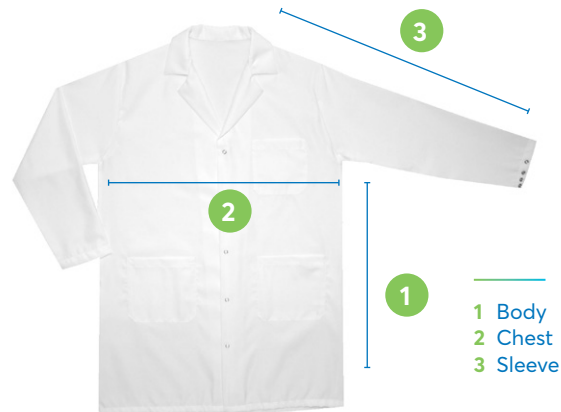


Apparel icon legend:  
page 4

Size	Cat. No.	Case of
2X-Small	10141-312	25
X-Small	10141-314	25
Small	10141-316	25
Medium	10141-318	25
Large	10141-320	25
X-Large	10141-322	25
2X-Large	10141-324	25

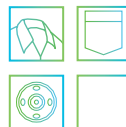
#### Reusable Lab Coat, Women's dimensions

Size	2XS	XS	S	M	L	XL	2X
Body (1)	36"	36"	36"	36"	36"	36"	36"
Chest (2)	26-28"	30-32"	34-36"	38-40"	42-44"	46-48"	50-52"



### VWR® UNISEX TWILL REUSABLE LAB COATS, UNISEX

VWR® Reusable Unisex Poly/Cotton Blend (65% polyester/35% cotton) Twill Lab Coat features a five-snap "quick-release" front and adjustable snap cuffs. It also has two lower front pockets and one left breast pocket with pencil slot. Includes side vents for pants pocket access. Made from durable, industrial 5.3 ounce fabric.

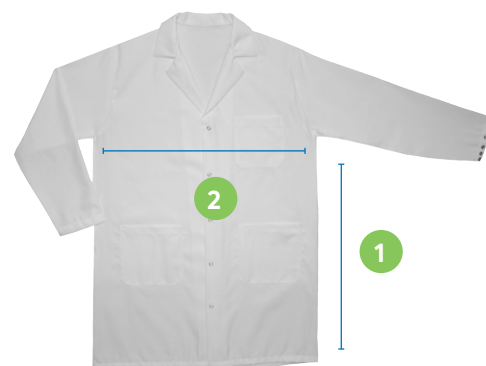


Apparel icon  
legend: page 4

Size	Cat. No.	Case of
White		
2X-Small	76048-778	25
X-Small	76048-780	25
Small	76048-826	25
Medium	76048-828	25
Large	76048-830	25

#### Coat dimensions

Size	2XS	XS	S	M	L	XL	2X	3X	4X	5X
Body (1)	39"	39"	39"	39"	39"	39"	39"	39"	39"	39"
Chest (2)	36"	40"	44"	48"	51"	55"	59"	64"	68"	72"
Sleeve (3)	23"	23½"	24"	24"	25"	25"	25"	25"	26"	26"



### VWR® REUSABLE 100% COTTON LAB COAT, UNISEX



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White		
X-Small	10753-930	25
Small	10753-932	25
Medium	10753-934	25
Large	10753-936	25
X-Large	10753-938	25
2X-Large	10753-940	25
3X-Large	10753-904	25

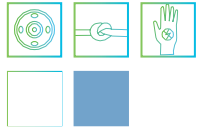
## A. VWR® PROTECTION ESD LAB COATS

VWR® Protection ESD Lab Coats are effective static-dissipative, reusable garments in the VWR ESD line of apparel. They are manufactured from Cleanroom Class 1000 polyester fabric, with polyester knit cuffs, offering comfort to users and protection for static-sensitive materials. This fabric contains a 2% carbon conductive grid pattern for static dissipation. The knit cuff also contains a 5% carbon conductive yarn woven into the polyester fabric for ultimate ESD control.

- Effectively dissipates static charge
- ESD knit cuffs prevent foreign materials from landing on your product through sleeve openings

### Material properties

Test Item	Result	Test Method
<b>Fabric Physical Properties</b>		
<b>Composition</b>	98% Polyester Filament Yarn + 2% Carbon Filament Yarn	ASTM-D-629
<b>Weave</b>	2/1 twill, 5mm ESD Grid	
<b>Density</b>	Warp 165 ends/inch	
<b>Weft 85 ends/inch</b>	65 ends/cm	
<b>35 end/cm</b>		
<b>Yarn Type</b>	Warp Polyester 100D/48F + Conductive Yarn	
<b>Weft Polyester 100D/48F + Conductive Yarn</b>		
<b>Surface Resistivity</b>	106-8 (42% R.H., 21C) ohm/square	DIN 54345
<b>Air Permeability</b>	1.22 c.c/cm <sup>2</sup> /sec	JIS L1096-A-1990
<b>Tensile Strength</b>	Warp 152.96 Kg Weft 84.88 Kg	Tensile Strength Tensile Strength
<b>Tear Strength</b>	Warp 2050 g Weft 1200 g	Tear Strength Tear Strength
<b>Knit Cuff Physical Properties</b>		
<b>Composition</b>	95% Polyester + 5% Carbon Yarn	
<b>Weave</b>	Conductive Knitting Cuff	
<b>Weight</b>	48 g/y, g/ ±10%	
<b>Yarn Type</b>	300D Polyester+50D Polyester	
<b>20% Conductive Yarn (J-Type)</b>		
<b>Surface Resistivity</b>	108-9 (42% R.H., 21C) ohm/square	
<b>Air Permeability</b>	1.22 c.c/cm <sup>2</sup> /sec	



Apparel icon legend:  
page 4

<b>White</b>			
X-Small	<b>82128-756</b>		Each
2X-Large	<b>82128-744</b>		Each
3X-Large	<b>82129-228</b>		Each
4X-Large	<b>82128-746</b>		Each
5X-Large	<b>82129-376</b>		Each
<b>Blue</b>			
Small	<b>10769-336</b>		Each
Medium	<b>10769-338</b>		Each
Large	<b>10769-340</b>		Each
X-Large	<b>10769-342</b>		Each
2X-Large	<b>10769-344</b>		Each
3X-Large	<b>10769-346</b>		Each
4X-Large	<b>10769-348</b>		Each

### Coat dimensions

Size	S	M	L	XL	2XL	3XL	4XL
<b>Body</b>	38½"	43"	45"	47"	43½"	44½"	46½"
<b>Chest</b>	21¼"	23"	24½"	26"	29½"	30¾"	31"
<b>Sleeve</b>	24"	24½"	25¼"	27"	37½"	38¼"	39"

## B. VWR® SCRUBS

These scrubs provide an excellent base layer of protection in any clinical setting without sacrificing comfort.

- Made with 65% polyester and 35% cotton
- Color-coded label for sizing
- Soft and comfortable

### VWR® V-NECK SCRUB TOP

- Featuring a V-neck and chest pocket

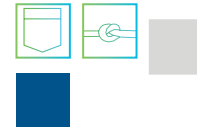


Apparel icon legend:  
page 4

Size	Cat. No.	Unit
<b>Grey</b>		
2X-Small	<b>76268-926</b>	Each
X-Small	<b>76268-928</b>	Each
Small	<b>76268-930</b>	Each
Medium	<b>76268-932</b>	Each
Large	<b>76268-934</b>	Each
X-Large	<b>76268-936</b>	Each
2X-Large	<b>76268-938</b>	Each
3X-Large	<b>76268-940</b>	Each
4X-Large	<b>76268-942</b>	Each
5X-Large	<b>76268-944</b>	Each
<b>Navy</b>		
2X-Small	<b>76268-946</b>	Each
X-Small	<b>76268-948</b>	Each
Small	<b>76269-078</b>	Each
Medium	<b>76269-080</b>	Each
Large	<b>76269-082</b>	Each
X-Large	<b>76269-084</b>	Each
2X-Large	<b>76269-086</b>	Each
3X-Large	<b>76269-088</b>	Each
4X-Large	<b>76269-090</b>	Each
5X-Large	<b>76269-092</b>	Each

### VWR® UNISEX SCRUB PANTS

- These scrub pants have a hip pocket and secure drawstring waist



Apparel icon legend:  
page 4

Size	Cat. No.	Unit
<b>Grey</b>		
2X-Small	<b>76268-870</b>	Each
X-Small	<b>76268-872</b>	Each
Small	<b>76268-874</b>	Each
Medium	<b>76268-876</b>	Each
Large	<b>76268-884</b>	Each
X-Large	<b>76268-886</b>	Each
2X-Large	<b>76268-888</b>	Each
3X-Large	<b>76268-890</b>	Each
4X-Large	<b>76268-892</b>	Each
5X-Large	<b>76268-894</b>	Each
<b>Navy</b>		
2X-Small	<b>76268-896</b>	Each
X-Small	<b>76268-898</b>	Each
Small	<b>76269-070</b>	Each
Medium	<b>76269-072</b>	Each
Large	<b>76269-074</b>	Each
X-Large	<b>76269-076</b>	Each
2X-Large	<b>76268-904</b>	Each
3X-Large	<b>76268-906</b>	Each
4X-Large	<b>76268-908</b>	Each
5X-Large	<b>76268-910</b>	Each

C. VWR® ESD MICRO-DENIER SCRUBS

This style of scrub is widely used in pharmaceutical cleanroom operations, and meets/exceeds the recommendations outlined in the IEST-RP-CC-003.4, Garment Considerations for Cleanrooms and Other Controlled Environments. These scrubs provide an excellent base-layer of protection for any cleanroom garment system. Made with sandwash material, this lightweight micro-denier fabric is woven from 100% continuous filament polyester to eliminate any source for lint.

VWR® ESD MICRO-DENIER SCRUB TOPS

- Pullover design with three-snap, Henley-style collar that provides added room for easy on/off
- Binding on collar helps maintain shape and uniformity
- Raglan-style sleeves provide increased mobility
- Sleeves include color-coordinated filament knit cuff for extra comfort
- 5" side slits at garment bottom for added comfort and long-term durability



Apparel icon legend:  
page 4

Size	Cat. No.	Unit
Navy Blue		
2X-Small	76202-674	Each
X-Small	76202-676	Each
Small	76202-658	Each
Medium	76202-660	Each
Large	76202-662	Each
X-Large	76202-664	Each
2X-Large	76202-666	Each
3X-Large	76202-668	Each
4X-Large	76202-670	Each
5X-Large	76202-672	Each
6X-Large	76202-678	Each

VWR® ESD MICRO-DENIER SCRUB PANTS

- Combination elastic back and drawstring front for secure comfort
- Leg opening with elastic back and three-position snaps for closure
- Double-needle felled outer seams for extra durability
- Garments include color-coded loops for easy size identification
- All edges are pre-serged or laser cut for lint limitation



Apparel icon legend:  
page 4

Size	Cat. No.	Unit
Navy Blue		
X-Small	76202-680	Each
Small	76202-682	Each
Medium	76202-684	Each
Large	76202-686	Each
X-Large	76202-688	Each
2X-Large	76202-690	Each
3X-Large	76202-692	Each
4X-Large	76202-696	Each
5X-Large	76202-698	Each
6X-Large	76202-700	Each





Apparel icon legend:  
page 4

VWR® CLEANROOM SOCKS

- 100% Polyester
- White
- Disposable socks are cost-effective
- Reusable socks are launderable



Size	Cat. No.	Case of
Disposable Ankle Socks		
Universal	76153-244	2000 Pairs
Reusable Crew Socks		
Small	76102-192	200 Pairs
Medium	76102-194	200 Pairs
Large	76102-196	200 Pairs
X-Large	76102-198	200 Pairs



Apparel icon legend:  
page 4

VWR® CLEANROOM CLOGS

- Antistatic
- Autoclavable
- Smooth surface for day long comfort
- Special conical design prevents spilled fluids from entering inside the clog
- Heel strap
- Anatomic heel basin
- Toe grabber
- Non-slip sole
- White



Size	US Size	EU Size	Cat. No.	Case of
X-Small	4-5.5	35-36	76077-098	6 Pair
Small	6-7.5	37-38	76076-792	6 Pair
Medium	8-9.5	39-40	76076-794	6 Pair
Large	10-11.5	41-42	76076-796	6 Pair
X-Large	12-13.5	43-44	76076-798	6 Pair
2X-Large	14-15.5	45-46	76076-866	6 Pair

# VWR® Basic Protection

---

ECONOMICAL

FIRST LINE BARRIER

MAXIMUM BREATHABILITY



VWR® BASIC PROTECTION SPP COVERALLS, LAB COATS AND FROCKS

- Economical
- First line barrier
- Maximum breathability
- Serged seams

VWR® Basic Protection SPP Coveralls, Lab Coats and Frock 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. Recommended for ISO 8 or higher.

Material properties

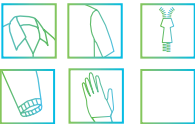
Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level II	IEST-RP-CC003.3
Weight (g/m²)	48.82	ASTM D3776
Ball Bursting Strength (Avg. lbs./in.)	21.1	ASTM D6797
Tensile Strength (Avg. lbs./in.)		
Warp	25.9	ASTM D5034
Filling	23.1	
Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	4.2	ASTM D2261
Widthwise Yarns	4.0	
Test Item	Result	Test Standard
Barrier Properties		
Bacterial Filtration Efficiency*	55%	ASTM F2101
Water Resistance (Avg. g)	21.7	AATCC Method 42
Comfort Properties		
Water Vapor Transmission Rate (Avg. g/m²/24 hrs.)†	1257	ASTM E96
Air Permeability (cu. ft./min./sq. ft.)	840.63	ASTM D737

\*Control Average: 2233 CFU.  
†Procedure B, Water Method, 73.4°F 50% Rh; Air Gap: ¼".



Coveralls

VWR® BASIC PROTECTION SPP COVERALLS



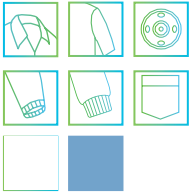
Apparel icon legend:  
page 4

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
White with Thumb Loops		
Large	76285-344	25
X-Large	76285-346	25
2X-Large	76285-348	25
3X-Large	76285-350	25
4X-Large	76285-352	25
Blue		
Large	89208-738	25
X-Large	89208-740	25
2X-Large	89208-742	25
3X-Large	89208-744	25
4X-Large	89208-746	25
5X-Large	89208-748	25

Coverall dimensions

Size	M	L	XL	2X	3X	4X	5X
Body (1)	37½"	38¾"	40"	40½"	43"	43"	43½"
Chest (2)	24¼"	25"	27"	29¾"	32"	32½"	33½"
Sleeve (3)	34"	34"	36½"	37"	38"	41"	42"
Leg (4)	28½"	29½"	30"	31"	32"	32½"	33"

## VWR® BASIC PROTECTION SPP LAB COATS



Apparel icon legend:  
page 4

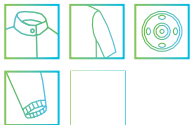
Size	Cat. No.	Case of
<b>Elastic Cuffs, No Pockets, White</b>		
Small	414004-352	25
Medium	414004-353	25
Large	414004-351	25
X-Large	414004-350	25
2X-Large	414004-349	25
3X-Large	76311-258	25
4X-Large	414004-354	25
<b>Elastic Cuffs, Three Pockets, Blue</b>		
Large	89208-750	30
X-Large	89208-752	30
2X-Large	89208-754	30
4X-Large	89208-756	30
<b>Knit Cuffs, No Pockets, White</b>		
2X-Large	89136-824	30
4X-Large	89208-820	30
5X-Large	89136-828	30
<b>Knit Cuffs, Three Pockets, White</b>		
Small	414004-346	30
Medium	414004-345	30
Large	414004-344	30
X-Large	414004-342	30
2X-Large	414004-343	30
3X-Large	414004-348	30
<b>Knit Cuffs, Knit Collar, Three Pockets, White</b>		
X-Large	89208-816	30



### Lab Coat dimensions

Size	S	M	L	XL	2X	3X	4X	5X
<b>Body (1)</b>	36¼"	39½"	40"	42¾"	43½"	44½"	46½"	47½"
<b>Chest (2)</b>	24¼"	25¼"	27"	27¾"	29½"	30¾"	31½"	33"
<b>Sleeve (3)</b>	30"	30¼"	32½"	33"	37½"	38¼"	39¼"	42½"

## VWR® BASIC PROTECTION SPP FROCKS



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
Medium	414004-384	30
Large	414004-383	30
X-Large	414004-381	30
2X-Large	414004-400	30
3X-Large	414004-382	30



### Frock dimensions

Size	M	L	XL	2X	3X
<b>Body (1)</b>	42½"	43½"	46"	47½"	51½"
<b>Chest (2)</b>	22¾"	23½"	24¾"	26½"	29"
<b>Sleeve (3)</b>	34½"	35½"	36½"	37½"	40"

VWR® BASIC PROTECTION SPP GOWNS

- Economical
- First line barrier
- Non-linting
- Serged seams

VWR® Basic Protection Gowns are manufactured from strong, lightweight and breathable spunbonded polypropylene (SPP) fabric, which protects against dirt, grime and certain dry particulates in nonhazardous environments. Ideal for lab animal research.

Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level II	IEST-RP-CC003.3
Weight (g/m²)	25.49	ASTM D3776
Tensile Strength (Avg. lbs./in.)		
Warp	12.6	ASTM D5034
Filling	10.4	
Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	1.6	ASTM D2261
Widthwise Yarns	1.6	

VWR® BASIC PROTECTION ISOLATION GOWNS



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
Yellow		
Large	414004-467	50
X-Large	414004-468	50
Blue		
Large	89178-402	50
X-Large	89178-404	50

Gown dimensions

Size	L	XL
Body (1)	45"	47¼"
Chest (2)	27"	30"
Sleeve (3)	23"	24¾"
Waist Tie Length (4)	29½"	29½"
Neck Tie Length (5)	11"	11"



- 1 Body
- 2 Chest
- 3 Sleeve
- 4 Waist Tie
- 5 Neck Tie

VWR® BASIC PROTECTION DISPOSABLE SLEEVE

Disposable non-woven sleeves are made of durable 30g SPP fabric. These garments feature serged seams and an elastic band on both ends. Sleeves provide reliable particulate protection in laboratory, food, industrial and cleanroom applications.

Size	Cat. No.	Case of
Universal	89208-758	300



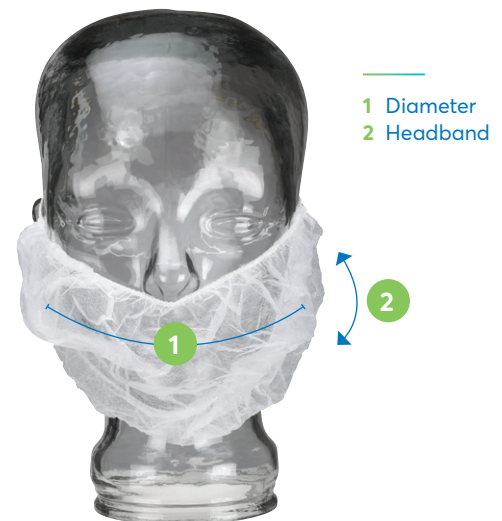
## VWR® BASIC PROTECTION BOUFFANT CAPS AND BEARD COVERS

- Economical
- First line barrier
- Non-linting
- Latex free

VWR® Basic Protection Bouffant Caps and Beard Covers are manufactured from strong, lightweight and breathable spunbonded polypropylene (SPP) fabric, which protects against dirt, grime and certain dry particulates in nonhazardous environments.

### Material properties

Test Item	Result	Test Standard
<b>Physical Properties</b>		
Particle Shedding (Helmke Drum)	Level II	IEST-RP-CC003.3
Weight (g/m <sup>2</sup> )	10.0	ASTM D3776
<b>Tensile Strength (Avg. lbs./in.)</b>		
Warp	>15	ASTM D5034
Filling	>7	
Elongation (%)	>30	



## VWR® BASIC PROTECTION SPP BOUFFANT CAPS



Apparel icon legend:  
page 4

Size	Color	Cat. No.	Case of
<b>Elastic Caps</b>			
Small	White	89107-768	1000
Small	Blue	89131-620	1000
Large	White	89107-770	1000
Large	Blue	89131-622	1000
X-Large	White	89186-064	1000
X-Large	Blue	76003-494	1000
<b>Pleated Caps</b>			
Small	White	89522-670	1000
Large	White	89522-672	1000

### Bouffant Cap dimensions

Size	S	L	XL
Diameter, Relaxed (1)	8"	8½"	9"
Diameter, Stretched (1)	21"	24"	28"

## VWR® BASIC PROTECTION SPP BEARD COVERS



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
Universal	89107-778	1000
X-Large	89218-950	1000
X-Large, Machine Made	79109-100	1000
<b>Blue</b>		
Large	76041-654	1000
X-Large	76041-656	1000

### Beard Cover dimensions

Size	Universal	XL
Diameter, Relaxed (1)	6"	6"
Diameter, Stretched (1)	16"	18"
Headband (2)	10"	10"



VWR® BASIC PROTECTION HOOD AND FACE COVER

- Polypropylene head covering to protect product and environment from contamination
- Bulk-packed with polybag and case liner

Material properties

Test Item	Result			Test Standard
Physical Properties				
		Average	Tolerance	
Weight (g/m²)		20.0	+/-2	GB/T4669-1995
Tensile Strength (Avg. lbs./in.)				
Break Tensile Properties (N)	MD	>40	—	ASTM D5034
Break Tensile Properties (N)	CD	>20	—	
Elongation (%)	MD	>60	—	
Elongation (%)	CD	>70	—	

Apparel icon legend: page 4

Size	Cat. No.	Case of
White		
Universal	89187-796	500
X-Large	76292-068	500

Hood and face cover dimensions

Size	Universal
Height (1)	13.75"
Height (2)	1.5"
Elastic Band (3)	7"
Elastic Band (4)	5.5"



VWR® BASIC PROTECTION MASK

- Two-ply mask provides basic barrier
- Highly breathable and fluid-resistant
- Malleable noseband ensures custom, secure seal
- Packaged in cleanroom-compatible, heat-sealed bags
- Latex-free

The VWR® Basic Protection Mask features two-ply construction with an ultra-soft inner layer to provide a high level of comfort. Ultrasonically welded spandex ear loops and an encased, 12 cm (4¾") malleable aluminum noseband create a secure facial seal and improve wearer comfort. Packaged 50 masks per heat-sealed bag, 10 bags per case. Dimensions: 17.5L x 9.5H cm (6⅞ x 3¾").

Material properties

Test Item	Result	Test Standard
Physical Property		
Particle Shedding (Particles: ≥0.5µm/cu. ft.)	20	TEST-RP-CC003.3
Barrier Properties		
Bacterial Filtration Efficiency* (%)	31–39	ASTM F2101
Particle Filtration Efficiency* (%)	72–77	ASTM F2299
Comfort Property		
Delta P Breathability (mmH2O/cm²)	0.4	MIL-M-36954C

\*Control average: 2368 Colony Forming Units. Mean particle size: 2.7 µm \*Particle size: 0.1 µm. Note: The data shown above represent typical values at the time of publication. These are not specifications.

Apparel icon legend: page 4

Description	Cat. No.	Case of
White*	414004-680	500
*Pigment- and dye-free.		

Two layers of protection

- Outer layer: 18 g/m² nonwoven polypropylene
- Inner layer: 21 g/m² thermally bonded nonwoven polypropylene



### VWR® BASIC PROTECTION SPP SHOE COVERS

- Economical
- First line barrier
- Rubber skid-resistant coating
- Serged seams

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



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>Standard, Blue</b>		
Universal	97041-234	300
<b>Anti-Skid, Blue</b>		
Universal	97041-236	300
X-Large	414004-653	300
<b>Heavyweight, Anti-Skid, Blue</b>		
Universal (15½")	89233-794	300

#### Shoe cover dimensions

Size	Universal	XL
Length (1)	17½"	18½"
Height (2)	6¾"	7¾"
Top, Relaxed (3)	5"	5½"
Top, Stretched (3)	11½"	15"

#### Material properties shoe covers

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level II	IENT-RP-CC003.3
Weight (g/m²)	36.89	ASTM D3776
Mullen Bursting Strength (Avg. PSI)	10.8	ASTM D3786
Trapezoid Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	6.1	ASTM D4533
Widthwise Yarns	7.9	
Barrier Property		
Bacterial Filtration Efficiency*	55%	ASTM F2101
Skid-Resistance Properties		
Coefficient of Friction (COF)		
Kinetic COF	1.80	ASTM D1894
Static COF	1.02	

\*Control Average: 2233 CFU.

#### Material properties heavyweight shoe covers

Item		Standard		Test Method
		Average	Tolerance	
Weight (g/m²)		40	+/-2	GB/T4669-1995
Break Tensile Properties (N)	MD	>35		GB/T3923.1-1997
	CD	>55		GB/T3923.1-1997
Elongation Rate (%)	MD	>50		GB/T3923.1-1997
	CD	>50		GB/T3923.1-1997



VWR® BASIC PROTECTION CPE SHOE COVERS

- Ideal for short-wear applications
- All film with heat-sealed seams
- Excellent fluid resistance

VWR® Basic Protection CPE Shoe Covers are manufactured from low-density chlorinated polyethylene (CPE) fabric, which protects against dirt, grime and liquid splash. These nonconductive shoe covers have a seamless bottom to repel water. Heat-sealed seams provide excellent fluid resistance.

Material properties

Test Item	Result	Test Standard
Physical Properties		
Weight (g/m²)	48.82	ASTM D3776
Mullen Bursting Strength (Avg. PSI)	6.2	ASTM D3786
Trapezoid Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	2.4	ASTM D4533
Widthwise Yarns	3.1	

Size	Cat. No.	Case of
White		
X-Large	414004-513	1000
Blue		
X-Large	414004-512	1000

Shoe cover dimensions

Size	XL
Length (1)	16"
Height (2)	5¾"
Top, Relaxed (3)	3¼"
Top, Stretched (3)	16"

## VWR® BASIC PROTECTION SMS COVERALLS, LAB COATS AND FROCKS

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

VWR® Basic Protection SMS Coveralls, Lab Coats and Frockes are manufactured from a latex-free, multilayer spunbonded-meltblown-spunbonded (SMS) fabric that offers high tensile strength while remaining soft, comfortable and breathable. Serged seams. Recommended for ISO 7 or higher.

### Material properties

Test Item	Result	Test Standard
Physical Properties		
Particle Shedding (Helmke Drum)	Level II	IEST-RP-CC003.3
Weight (g/m²)	50.45	ASTM D3776
Ball Bursting Strength (Avg. lbs./in.)	14.2	ASTM D6797
Tensile Strength (Avg. lbs./in.)		
Warp	13.0	ASTM D5034
Filling	16.1	
Tearing Strength (Avg. lbs./in.)		
Lengthwise Yarns	3.1	ASTM D2261
Widthwise Yarns	2.6	
Test Item	Result	Test Standard
Barrier Properties		
Bacterial Filtration Efficiency*	90%	ASTM F2101
Water Resistance (Avg. g)	16.7	AATCC Method 42
Comfort Properties		
Water Vapor Transmission Rate (Avg. g/m²/24 hrs.)†	965	ASTM E96
Air Permeability (cu. ft./min./sq. ft.)	95.3	ASTM D737

\*Control Average: 2233 CFU. †Procedure B, Water Method, 73.4°F 50% Rh; Air Gap: ¼".

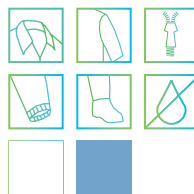
### Coverall dimensions

Size	S	M	L	XL	2X	3X	4X	5X	7X
Body (1)	36½"	37½"	38¾"	40"	40½"	43"	43"	43½"	44"
Chest (2)	23"	24¼"	25"	27"	29¾"	32"	32½"	33½"	40½"
Sleeve (3)	32½"	34"	34"	36½"	37"	38"	41"	42"	42"
Leg (4)	28"	28½"	29½"	30"	31"	32"	32½"	33"	34"



Coverall

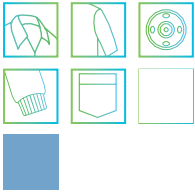
## VWR® BASIC PROTECTION SMS COVERALLS



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
<b>White</b>		
Medium	414004-333	25
Large	414004-331	25
X-Large	414004-330	25
2X-Large	414004-329	25
3X-Large	414004-334	25
4X-Large	414004-332	25
5X-Large	89234-870	25
7X-Large	89234-872	25
<b>Blue</b>		
Small	414004-328	25
Medium	414004-327	25
Large	414004-325	25
X-Large	414004-324	25
2X-Large	414004-322	25
3X-Large	414004-323	25
4X-Large	414004-326	25
5X-Large	89234-874	25
7X-Large	89234-876	25
<b>White with Attached Fluid-Impervious Boot Covers</b>		
Medium	414004-688	25
Large	414004-689	25
X-Large	414004-690	25
2X-Large	414004-691	25

VWR® BASIC PROTECTION SMS LAB COATS SIZE

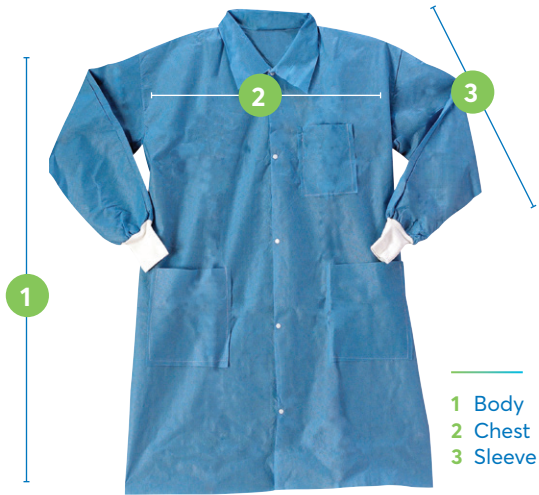


Apparel icon legend:  
page 4

	Cat. No.	Case of
White		
Small	414004-366	30
Medium	414004-362	30
Large	414004-363	30
X-Large	414004-361	30
2X-Large	414004-364	30
3X-Large	414004-365	30
4X-Large	414004-367	30
Blue		
Small	414004-359	30
Medium	414004-358	30
Large	414004-355	30
X-Large	414004-356	30
2X-Large	414004-357	30
3X-Large	414004-360	30

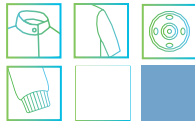
Lab Coat Dimensions Size

Size	S	M	L	XL	2X	3X	4X
Body (1)	36¾"	39½"	40"	42¾"	43½"	44½"	46½"
Chest (2)	24¼"	25¼"	27"	27¾"	29½"	30¾"	31½"
Sleeve (3)	30"	30¼"	32½"	33"	37½"	38¼"	39¼"



Lab Coats

VWR® BASIC PROTECTION SMS FROCKS



Apparel icon legend:  
page 4

Size	Cat. No.	Case of
White		
Small	414004-392	30
Medium	414004-389	30
Large	414004-388	30
X-Large	414004-386	30
2X-Large	414004-385	30
3X-Large	414004-387	30
Blue		
X-Small	75854-026	30
Medium	414004-390	30
Large	414004-402	30
X-Large	414004-403	30
2X-Large	414004-401	30
3X-Large	414004-391	30
4X-Large	75840-186	30
5X-Large	75854-028	30

Frock dimensions

Size	S	M	L	XL	2X	3X
Body (1)	40½"	42½"	43½"	46"	47½"	51½"
Chest (2)	21¾"	22¾"	23½"	24¾"	26½"	29"
Sleeve (3)	33½"	34½"	35½"	36½"	37½"	40"



Frocks



Visit  
**VWR.COM**  
for more info on  
scrub styles!



**VWR® BASIC PROTECTION SMS SCRUB  
TOP WITH ADJUSTABLE COLLAR**

Disposable scrub shirt features long sleeves with snap adjustable neck closure. It does not have any pockets.

This blue garment features high quality sewn seam construction.

Size	Cat. No.	Case of
Small	10755-052	30
Medium	10754-966	30
Large	10754-968	30
X-Large	10754-970	30
2X-Large	10754-972	30
3X-Large	10754-974	30

**VWR® BASIC PROTECTION SMS SCRUB PANTS**

These blue disposable scrub pants meet PPE requirements and feature an elastic waist and high quality sewn seam construction.

Size	Cat. No.	Case of
With Hip Pockets		
X-Small	76006-546	30
Small	76006-548	30
Medium	75832-236	30
Large	75832-238	30
X-Large	75832-240	30
XX-Large	75832-242	30
3X-Large	75832-244	30
4X-Large	75832-246	30
5X-Large	75832-248	30
6X-Large	75832-250	30
7X-Large	75832-252	30
Without Hip Pockets		
X-Small	76006-532	30
Small	76006-534	30
Medium	76006-536	30
Large	76006-538	30
X-Large	76006-540	30
XX-Large	76006-550	30
3X-Large	76006-552	30
4X-Large	76006-554	30
5X-Large	76006-556	30
6X-Large	75832-232	30
7X-Large	75832-234	30

# VWR® Goggles and Eyewear

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STERILE AND NON-STERILE OPTIONS

AVAILABLE FOR A VARIETY OF APPLICATIONS

COMFORTABLE



## VWR® GOGGLES

- Sterile and non-sterile options
- Multiple applications
- Comfortable

VWR® offers a series of high quality comfortable goggles that are designed for performance in a variety of clean and non-controlled areas across multiple markets including biopharmaceutical production and research laboratories.

### Material properties

Features	Cat. No. 10770-146	Cat. No. 10770-152 and 89522-676
	Direct ventilation	Indirect ventilation
	Vents maximize airflow	Quad vents to minimize lens fogging
	Lightweight PVC frame	
	Anti-fog and anti-scratch lenses	
	Fit over most prescription glasses	
	EtO Sterilization	
	Packed in DuPont™Tyvek®/PE pouch	
Material:		
Lens	Polycarbonate	
Frame	PVC	
Elastic Band	Silicone Rubber	
Vent	NA	HDPE
Weight and Dimension:		
Total Weight	80.5 g	72.5 g
Lens Thickness	2 mm	
Lens Base Curves	0	
Bridge Width	35 mm	30 mm
Bridge Height	20 mm	15 mm
Overall Width (Hinge to Hinge)	190 mm	165 mm
Overall Length	70 mm	70 mm
Overall Height	90 mm	85 mm
Optical Requirements:		
Luminous Transmittance	100 ≥ T (L) ≥ 85	
Refractive Power		
- Refractive Power	+/-0.06 m <sup>-1</sup>	
- Astigmatism	≤ 0.06 m <sup>-1</sup>	
Prismatic Power		
- Prismatic Power	≤ 0.25 cm/m	
- Vertical Imbalance	≤ 0.125 cm/m	
- Horizontal Imbalance	≤ 0.5 cm/m Base Out ≤ 0.125 cm/m Base In	
Impact Requirements		
High Mass Impact		
- Velocity = 25.4mm 500g	Pass	
- Drop from height 127 cm		
High Velocity Impact		
- Velocity = 76.2 m/s (250 ft/s)	Pass	
- 6.35 mm 1.06g		



69100-210



10770-146



10770-152

## VWR® STERILE DISPOSABLE GOGGLES

The individually bagged VWR® Sterile Disposable Goggles provide optimum comfort for extended wear times and come in two types of ventilation: indirect and direct. They are produced under stringent conditions and monitored closely to ensure high levels of quality for every pair. These goggles have passed tests according to the American National Standard for Occupational and Educational Personal Eye and Face Protective Devices, ANSI Z87.1:2010. They are ideal for use in controlled environments requiring sterile apparel.

- Sterile 10<sup>-6</sup> SAL
- Lightweight for enhanced comfort
- Individually bagged
- Anti-fogging and anti-scratch
- Fits over most prescription glasses
- Adjustable strap for customized fit

10<sup>-6</sup>

Apparel icon legend:  
page 4

Lens Tint	Ventilation	Cat. No.	Case of
Clear	Direct	10770-146	100
Clear	Indirect	10770-152	100
Green	Indirect	69100-210	50

VWR® NON-STERILE SAFETY GOGGLES

VWR® Non-Sterile Safety Goggles provide optimum comfort for extended wear and fit over most prescription glasses. They are available in two types of ventilation (indirect and direct) and two types of lens coating (uncoated and anti-fog). These economical goggles are designed to protect from hazards with a flexible ridge around a PVC frame and a fully adjustable headband. These goggles provide 99.9% U.V. protection.

Produced under stringent conditions, these goggles are monitored closely to ensure high levels of quality for every pair. The goggles passed tests according to the American National Standard for Occupational and Educational Personal Eye and Face Protective Devices, ANSI Z87.1-2015.



Features	76017-902	75982-624	76017-944	75982-626
	Indirect Ventilation		Direct Ventilation	
	Quad vents to minimize lens fogging		Vents maximize airflow	
	Lightweight PVC frame			
	Fully adjustable headband			
	Fits over most prescription glasses			
	Meets ANSI Z87.1-2015 standards			
Material:				
Lens Coating	Uncoated	Anti-Fog	Uncoated	Anti-Fog
Lens	Polycarbonate (PC), Anti-UV 99.9%			
Frame	PVC			
Elastic Band	60% Textured Polyester + 40% Rubber Band			
Weight and Dimension:				
Total Weight	71.5 g		77.8 g	
Lens Thickness	2.0 mm		2.0 mm	
Lens Base Curves	0		0	
Bridge Width	30 mm		35 mm	
Bridge Height	15 mm		20 mm	
Overall Width (Hinge to Hinge)	160 mm		195 mm	
Overall Length	70 mm		70 mm	

Ventilation	Lens Coating	Cat. No.	Unit
Indirect	Uncoated	76017-902	Pack of 12 / Case of 144
Indirect	Anti-Fog, Anti-Scratch	75982-624	Pack of 12 / Case of 144
Direct	Uncoated	76017-944	Pack of 12 / Case of 144
Direct	Anti-Fog, Anti-Scratch	75982-626	Pack of 12 / Case of 144

VWR® EYEWASH STATIONS

- Wall mounted for quick access in emergencies
- Single or double configuration with two bottle size options
- Includes PhysiciansCare eyewash solution
- VWR® eyewash stations include a PhysiciansCare sterile isotonic buffered eye wash solution to help clear eyes of foreign material such as dust, pollen and chemicals, as well as to relieve itching and burning of eyes and skin. The plastic squeeze bottle with tear-off top helps create a fluid stream to direct the solution into affected areas.



Description	Cat. No.	Unit
Single 16 oz. Bottle	76049-022	Case of 6
Double 16 oz. Bottles	76049-028	Case of 6
Single 32 oz. Bottle	76049-030	Case of 6
Double 32 oz. Bottles	76049-032	Case of 6

These products are not available in Canada. Please contact your VWR Sales Representative to learn about similar options available in your region.



### VWR® INDUSTRIAL FIT SAFETY GOGGLES

VWR® Industrial Fit Safety Goggles are designed to increase comfort when users are required to wear other personal protective equipment. The sleek goggles are designed with a smaller fit across the face. Users are now able to wear their face masks, respirators, hard hats, etc., and still be able to protect their eyes with comfortable goggles. The wraparound indirect vent goggle features anti-fog and anti-scratch coatings to provide superior lens protection. The opalescent frame also prevents light reflection.

Produced under stringent conditions, these goggles are monitored closely to ensure high levels of quality for every pair. They provide 99.9% U.V. protection and have passed tests according to the American National Standard for Occupational and Education Personal Eye and Face Protective Devices, ANSI Z87.1-2015.

Features	Cat. No. 75982-630
	Indirect Ventilation
	Smaller fit Goggle
	Accommodates other PPE
	Opalescent frame prevents light reflection
	Meet ANSI Z87.1-2015 standards
Material:	
Lens	Polycarbonate (PC), Anti-UV 99.9%
Lens Coating	Anti-Fog, Anti-Scratch
Frame	PVC
Elastic Band	60% Textured Polyester + 40% Rubber Band
Buckle	Polyoxymethylene
Elastic Band Holder	Thermoplastic Elastomer (TPE)
Weight and Dimension:	
Total Weight	58 g
Lens Thickness	2.0 mm
Lens Base Curves	6
Bridge Width	25 mm
Bridge Height	20 mm
Overall Width	155 mm
Overall Length	60 mm

#### VWR® Industrial Fit Safety Goggles

Ventilation	Lens Coating	Cat. No.	Unit
Indirect	Anti-Fog, Anti-Scratch	75982-630	Pack of 12, Case of 144



### VWR® CHEMICAL SPLASH GOGGLES

VWR® Chemical Splash Goggles provide optimum comfort and maximum splash protection. These high quality safety goggles feature a modern, wraparound style; fogless, distortion-free panoramic lenses; indirect venting for liquid splash protection; and internal relief slots to reduce interference with prescription glasses. The wide elastic strap with adjustable buckle attaches to the frame with a swivel clip for a comfortable fit. The nose area is split for greater comfort and the wide facial flange provides a secure seal to most every face. These goggles provide 99.9% UV protection.

Produced under stringent conditions, these goggles are monitored closely to ensure high levels of quality for every pair. The goggles passed tests according to the American National Standard for Occupational and Educational Personal Eye and Face Protective Devices, ANSI Z87.1-2015.

Features	Cat. No. 75982-628
	Indirect Ventilation
	Anti-fog lens coating
	Lightweight PVC frame
	Fully adjustable headband
	Fits over most prescription glasses
	Meets ANSI Z87.1-2015 standards
Material:	
Lens	Polycarbonate (PC), Anti-UV 99.9%
Lens Coating	Anti-Fog
Frame	PVC
Elastic Band	60% Textured Polyester + 40% Rubber Band
Weight and Dimension:	
Total Weight	86.3 g
Lens Thickness	2.0 mm
Lens Base Curves	6
Bridge Width	30 mm
Bridge Height	20 mm
Overall Width	170 mm
Overall Length	75 mm

#### VWR® Chemical Splash Goggles

Ventilation	Lens Coating	Cat. No.	Unit
Indirect	Anti-Fog, Anti-Scratch	75982-628	Pack of 10, Case of 120

# VWR® Protective Eyewear and Safety Glasses

VWR® Protective Eyewear offers stylish and secure personal protection with an array of comfort features to assist the wearer throughout extended use. All styles feature impact and scratch resistant, anti-fog coated polycarbonate lenses that provide 99.9% UV protection. They are also all ANSI Z87.1 certified.

## VWR® PROTECTIVE EYEWEAR WITH WRAPAROUND LENS

- Lightweight design combines sleek appearance with rugged durability
- Rubberized temple tips and integrated nose piece for extra comfort
- Fits comfortably with half-mask respirators

Lens Color	Frame Color	Cat. No.	Pack of
Clear	Clear	89187-986	12
Blue	Clear	76329-622	12
Smoke	Clear	76329-624	12
Mirror	Clear	76329-626	12



## VWR® PROTECTIVE EYEWEAR WITH ADJUSTABLE TEMPLES

- Unique ratcheting temples lock into place for a custom fit
- Ultra-lightweight nylon frames and soft PVC nose pads to prevent slipping
- Eight-base spherical lenses provide excellent side protection

Lens Color	Frame Color	Cat. No.	Pack of
Clear	Black	89187-984	12



## VWR® SLEEK SAFETY GLASSES

- Super lightweight at 22.7 grams
- Dielectric construction
- Comfortable nose piece
- Slim temple with rubber pad

Lens Color	Frame Color	Cat. No.	Pack of
Clear	Blue	76210-826	12



## VWR® SPORT SAFETY GLASSES

- Anatomically-shaped nose adapts to all faces
- Co-injected comfort pad will not peel off in hot climates
- High-visibility rubber color

Lens Color	Frame Color	Cat. No.	Pack of
Clear	Smoke	76210-730	12



**VWR® LADIES PINK SAFETY GLASSES**

- Molded-in nose bridge
- Soft, non-slip rubber temple tip
- Most suitable for small facial contour



Lens Color	Frame Color	Cat. No.	Pack of
Clear	Pink	76210-824	12

**VWR® OTG SAFETY GLASSES**

- Fits over most prescription glasses
- Adjustable temple length for varied facial contours



Lens Color	Frame Color	Cat. No.	Pack of
Clear	Navy	76210-732	12

**VWR® VISITOR SPECS**

- Designed to fit comfortably over most prescription glasses
- Wraparound styling offers unobstructed peripheral vision
- Contoured protective brow guard and molded-in comfort nose bridge



Lens Color	Frame Color	Cat. No.	Pack of
Clear	Clear	89187-988	12

# VWR® Gloves

---

CLEANROOM

GENERAL USE

COMFORTABLE



### VWR® PROTECTION NITRILE GLOVES, AMBIDEXTROUS

- Textured fingers enhance grip on components
- Tapered, beaded cuff provides secure fit
- Silicone-free material minimizes ionic contaminants and nonvolatile residue (NVR) transfer

VWR® Protection Nitrile Gloves are manufactured from a synthetic copolymer of acrylonitrile, butadiene and methacrylic acid (components that comply with FDA CFR 21). These gloves exhibit high tensile strength and strong permeation resistance against a wide variety of solvents, acids and bases. Non-staining, non-smudging, single-use gloves reduce the risk of contamination to parts or components being handled by the user, even during prolonged wear.

To support cleanroom donning protocol, these gloves are double-bagged in sealed polyethylene cleanroom bags (100 per bag, 10 bags per carton liner). Each carton is double-walled. IPA-resistant ink is used on the bag and carton labels.

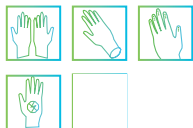
The gloves are rigorously tested and manufactured in an ISO certified facility under stringent process controls to ensure that each product meets exacting quality standards and performs to specification. Our products are lot controlled and validated through independent lab testing.

These gloves present minimal risk of causing allergic reactions. They do not contain any protein similar to latex and have undergone multiple vigorous rinsings in both hot and cold DI water during the manufacturing process, greatly reducing residual exposure to chemical compounds that may cause allergic reactions upon contact.



30.5cm (12") length and 5mil average thickness enhance coverage and protection

### VWR® MAXIMUM PROTECTION CLASS 10 NITRILE GLOVES

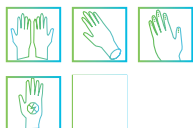


Apparel icon legend:  
page 4

Size	Cat. No.	Case of
X-Small	89130-848	1000
Small	89130-846	1000
Medium	89130-850	1000
Large	89130-852	1000
X-Large	89130-854	1000
2X-Large	89130-856	1000

Recommended for ISO Class 4 (FED-STD-209E Class 10/M2.5) or higher cleanrooms.

### VWR® ADVANCED PROTECTION CLASS 100 NITRILE GLOVES



Apparel icon legend:  
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Size	Cat. No.	Case of
X-Small	89130-834	1000
Small	89130-836	1000
Medium	89130-838	1000
Large	89130-840	1000
X-Large	89130-842	1000
2X-Large	89130-844	1000

Recommended for ISO Class 5 (FED-STD-209E Class 100/M3.5) or higher cleanrooms.

VWR® STERILE CLEANROOM NITRILE GLOVE, CLASS 100

Introducing the new VWR® Class 100 sterile nitrile gloves as a sterile bulk packed option to the popular line of VWR cleanroom gloves. Enhanced comfort and durability make these an ideal choice to add to any glove program.

- Sterile SAL 10<sup>-6</sup>, gamma irradiation
- Nitrile
- Ambidextrous
- Textured fingers
- Beaded cuff
- Natural rubber, latex-free
- Suitable for use in ISO Class 5 (FED-STD-209E Class 100) or higher cleanrooms.



VWR® STERILE CLEANROOM NITRILE GLOVE, CLASS 100



Apparel icon legend:  
page 4

Gloves are packaged 200 per bag, five bags per case.

Size	Cat. No.	Case of
X-Small	76423-444	1000
Small	76423-446	1000
Medium	76423-448	1000
Large	76423-450	1000
X-Large	76423-452	1000
2X-Large	76423-454	1000

VWR® STERILE CLASS 100 HS NITRILE GLOVES

The VWR® Sterile Class 100 HS Nitrile Gloves are intended for use in cleanroom production and research environments. These hand-specific gloves are pair packed for easy donning.

- Gamma irradiated to SAL 10<sup>-6</sup>
- Made from premium compounded Nitrile
- Single use only
- Suitable for use in ISO Class 5 (FED-STD-209E Class 100) or higher cleanrooms
- AQL level of 1.5 for pinholes

These gloves are manufactured from a synthetic copolymer of acrylonitrile, butadiene and methylacrylic acid (components that comply with FDA CFR 21). They feature high tensile strength and strong permeation resistance against a wide variety of solvents, acids and bases.

The gloves are static-dissipative to inhibit harmful static discharge and the silicone-free material minimizes ionic contaminants and nonvolatile residue (NVR) transfer.



VWR® STERILE CLASS 100 HS NITRILE GLOVES



Apparel icon legend:  
page 4

Gloves are packaged one pair per pack, 10 packs per intermediate bag, five intermediate bags per master bag, four master bags per case.

Size	Cat. No.	Case of
6	76458-114	200
6.5	76458-116	200
7	76458-118	200
7.5	76458-120	200
8	76458-122	200
8.5	76458-124	200
9	76458-126	200

## Technical Data for VWR® Protection Nitrile Gloves

Parameter	X-Small	Small	Medium	Large	X-Large	2X-Large
Dimensions						
Overall Length (mm)	290–310	290–310	290–310	290–310	290–310	290–310
Palm Width (mm)	70–80	80–90	90–100	100–110	110–120	120–130
Total Surface Area (cm², ±5%)	910	1037	1147	1208	1330	1346
Weight (g)	5.0–6.0	5.5–6.5	6.0–7.0	6.5–7.5	7.0–8.0	7.5–8.5
Finger Length (mm)						
Thumb	54	57	58	65	67	69
Index Finger	65	70	75	79	82	83
Middle Finger	75	79	85	90	91	92
Ring Finger	67	74	77	79	81	83
Small Finger	47	55	58	63	64	65
Thickness, mm (mil)						
Finger	0.10–0.20 (5.9)	0.10–0.20 (5.9)	0.10–0.20 (5.9)	0.10–0.20 (5.9)	0.10–0.20 (5.9)	0.10–0.20 (5.9)
Palm	0.10–0.15 (4.9)	0.10–0.15 (4.9)	0.10–0.15 (4.9)	0.10–0.15 (4.9)	0.10–0.15 (4.9)	0.10–0.15 (4.9)
Cuff	0.08–0.12 (3.9)	0.08–0.12 (3.9)	0.08–0.12 (3.9)	0.08–0.12 (3.9)	0.08–0.12 (3.9)	0.08–0.12 (3.9)

Test Item	Result	Test Standard
Physical Properties		
Tensile Strength (MPa)	≥18	ASTM D412
Modulus at 300% (MPa)	≤9	
Ultimate Elongation (%)	≥500	
Static-Dissipative Properties		
Surface Resistivity (Max. Ohms at 50% RH)	1 x 10 <sup>11</sup>	ASTM D257, ESD S11.11
Electrostatic Decay (Max. Seconds at 50% RH)	2	FTMS 101C-4046
Barrier Property		
Freedom from Holes (AQL)	1.5	ASTM D5151

Test Item	Result	Test Item	Result	Test Standard
Cleanliness Properties				
	Class 100	Class 10		
Particles (Max. ≥0.5µm/cm²)	1500	400	—	—
Extractables (Max. µg/cm²)			Extractables (Max. µg/cm²)	
Aluminum, Al3+	0.010	0.010	Magnesium, Mg2+	0.010
Ammonium, NH4+	0.005	0.050	Nickel, Ni2+	0.005
Bromide, Br-	0.010	0.005	Nitrate, NO3-	0.500
Calcium, Ca2+	0.500	0.300	Nitrite, NO2-	0.010
Chloride, Cl-	0.600	0.150	Phosphate, PO42-	0.010
Chromium, Cr6+	0.005	0.005	Potassium, K+	0.100
Copper, Cu2+	0.0004	0.0004	Silicone, Amide, and Diethylphthalate*	Not Detected
Ferri, Fe3+	0.010	0.010	Sodium, Na+	0.200
Fluoride, F-	0.010	0.005	Strontium, Sr2+	0.005
Isopropanol	5.000	5.000	Sulfate, SO42-	0.200
Lead, Pb2+	0.005	0.005	Tin, Sn4+	0.005
Lithium, Li+	0.010	0.001	Zinc, Zn2+	0.100

VWR® CERTICLEAN® CLASS 10 NITRILE GLOVES

VWR® CERTICLEAN® Class 10 Nitrile Gloves are ambidextrous, powder-free, and feature a beaded cuff for strength and reduction of cuff roll down. The strong, puncture-resistant construction includes a film thickness designed for comfort and tactile sensitivity and textured fingertips for a reliable grip. The gloves' manufacturing processes deliver low particle counts, and the proprietary nitrile formulation and processes reduce ionic contaminants and nonvolatile residue (NVR) transfer. The in-use statistic dissipative properties are superior to natural rubber latex.

- Thickness: 6.3 mil (finger), 5.1 mil (palm).
- Length: 30.5 cm (12") Color: white
- Certificates of Quality available on [vwr.com](http://vwr.com)



VWR® CERTICLEAN® CLASS 10 NITRILE GLOVES



Apparel icon legend:  
page 4

Packed in an ISO Class 4 (FED-STD-209E Class 10/M2.5) cleanroom. Packaged in cleanroom-compatible polyethylene, 100 gloves per double poly bag, 10 bags per case.

Size	Cat. No.	Case of
X-Small	40101-353	1000
Small	40101-352	1000
Medium	40101-354	1000
Large	40101-356	1000
Large Plus	40101-357	1000
X-Large	40101-358	1000

TECHNICAL DATA FOR VWR® CERTICLEAN® GLOVES

Physical data

	Watertight	Dimensions	Visual Defects Minor	Major	Elongation % Pre Aging	Tensile (MPa) Pre Aging
Sample Size	4824	640	4824	4824	300	300
AQL Level	1.5	2.5	4.0	2.5	1.5	2.5
Failures Allowed Per AQL 117	36	316	193	1.5	1.5	—
Failures	15	0	0	0	0	0
Inspection Results	Accept	Accept	Accept	Accept	Accept	Accept
				Averages:	668	

29.0 Test Methods: Watertight ASTM D5151, Elongation and Tensile ASTM D 412



Extractables

	Anions Results						
	Fluoride F <sup>-</sup>	Chloride Cl <sup>-</sup>	Nitrite NO <sub>2</sub> <sup>-</sup>	Bromide Br <sup>-</sup>	Nitrate NO <sub>3</sub> <sup>-</sup>	Phosphate PO <sub>4</sub> <sup>-3</sup>	Sulfate S <sub>4</sub> <sup>-2</sup>
µg/g glove	.05	10.8	<0.5	<0.5	3.1	<1.25	2.5
µg/cm <sup>2</sup>	0.003	0.075	<0.003	<0.003	0.020	<0.008	0.016
	Atons Results				Trace Element Results		
	Sodium NA <sup>+</sup> N	Ammonium H <sub>4</sub> <sup>+</sup>	Potassium K <sup>+</sup>	Magnesium Mg <sup>+2</sup>	Calcium Ca <sup>+2</sup>	Zinc Zn	
µg/g glove	1.3	0.8	<1.25	<0.625	5.5	0.1	
µg/cm <sup>2</sup>	0.003	0.005	<0.008	<0.004	0.008	0.022	

Test Method: IEST-RP-CC005

Liquid particle counts

Particle Size	Min	Max	Standard Deviation	Average Particles
0.5–1.0	173	106	110	425
1.0–2.0	11	223	46	85
2.0–5.0	6	45	8	10
5.0–10.0	1	6	1	3
10.0–20.0	0	2	0	1
>20	0	1	0	0
Total Per Sample	208	1112	256	101

Test Method: IEST-RP-CC005

**VWR® BLACK NITRILE GLOVES**

- Powder-free and latex-free
- Beaded cuffs
- Ambidextrous
- Thickness: 5.5 mil (Finger), 4.5 mil (Palm), 3.5 mil (Cuff)

The formulation with a fully textured surface for excellent barrier protection, durability and abrasion resistance during extended wear. The black color offers a sleek look and versatility for various applications.

**VWR® POWDER-FREE LATEX EXAMINATION GLOVES**

- Ambidextrous
- Natural rubber latex
- Straight fingers
- Single use

Powder-free examination gloves are manufactured from premium quality natural rubber latex. They are engineered to provide reliable, durable and comfortable hand protection in laboratory environments. These examination-grade gloves are fully textured for a secure grip, and feature straight fingers and beaded cuffs.



Size	Cat. No.	Pack of
Small	76307-462	100
Medium	76307-464	100
Large	76307-466	100
X-Large	76307-468	100

Apparel icon legend:  
page 4



Apparel icon legend:  
page 4

Size	Cat. No.	Pack of
X-Small	414004-428	100
Small	414004-429	100
Medium	414004-430	100
Large	414004-431	100
X-Large	414004-432	100

**VWR® NITRILE CHEMICAL SAFE GLOVES**

VWR® Nitrile Chemical Safe Gloves are specially formulated with a nitrile compound that provides outstanding protection against a wide range of chemicals, including most solvents and acids, strong detergents, greases, oils and animal fats.

- 15 mil (0.38 mm) thickness
- 13" (330 mm) length
- Fully textured
- Flock lined
- Exceptional flexibility and comfortable to wear

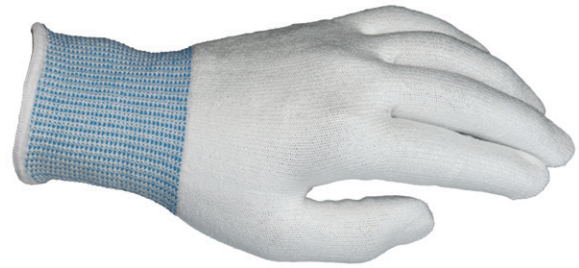
These gloves feature a patterned palm for excellent grip in both wet and dry conditions. A strong resistance against abrasion, cuts, snags and puncture ensures longer wear and better protection than natural rubber gloves.

**VWR® NITRILE CHEMICAL SAFE GLOVES**

Apparel icon legend:  
page 4

Gloves are packaged 12 pairs per bag, and 144 pairs per case.

Size	Cat No.	Case of
Small	76359-820	144
Medium	76359-822	144
Large	76359-824	144
X-Large	76359-826	144
2X-Large	76359-828	144



### VWR® GLOVE LINERS

- Ambidextrous glove liners
- Reduces perspiration and wicks away moisture
- Low-lint, 100% 15 denier nylon composition
- Sturdy, launderable and reusable
- Color-coded cuffs indicate size
- Pre-laundered; will not shrink

Ergonomically designed glove liners are made from 15 denier, low-lint nylon knit fabric. Liners provide protection and comfort when used with latex, nitrile, and PVC gloves. Fully launderable for reusability and economy.



Apparel icon legend:  
Page 4

Size	Cat. No.	Pack of
<b>Half Finger Liners</b>		
Small	94000-616	20 Pair
Medium	94000-618	20 Pair
Large	94000-620	20 Pair
X-Large	94000-622	20 Pair
<b>Full Finger Liners</b>		
Small	94000-608	20 Pair
Medium	94000-610	20 Pair
Large	94000-612	20 Pair
X-Large	94000-614	20 Pair
<b>Full Finger Liners, Extra-Thick</b>		
X-Large	10124-750	20 Pair

### VWR® CUT-RESISTANT GLOVE LINERS

- Cut-resistant nylon with HPPE (13-gauge)
- ANSI cut A2
- Sturdy, launderable and reusable
- Can be used effectively as a gowning glove

Glove liners provide a comfortable barrier that reduces perspiration and wicks moisture during extended use, prevents skin irritation without diminishing tactile sensitivity, and limits wear and tear. For use with latex, nitrile, PVC and all exam gloves.



Apparel icon legend:  
Page 4

Size	Color	Cat. No.	Pack of
<b>Full-Finger</b>			
Small	Green	76102-378	20 Pair
Medium	Orange	76102-380	20 Pair
Large	Blue	76102-382	20 Pair
Elbow Length	Red	76102-384	20 Pair
<b>Half-Finger</b>			
Large	Blue	76034-596	20 Pair

### VWR® CUFF TAPE

This cuff tape is a conformable polyethylene tape used to ensure an effective seal between the glove and garment in cleanroom gowning. Perforations at 3" intervals allow the user to bind and tear at the optimum length to seal the glove. The low-outgassing polyethylene film with acrylic adhesive removes cleanly, leaving no adhesive residue and will not tear gloves. Available irradiated.



Roll Size	2" x 36 yds
Backing	Low Density Polyethylene
Adhesive	Pressure Sensitive Acrylic
Adhesion to Steel	12 oz./inch width
Tensile Strength	12 lbs./inch width
Total Thickness	5.5 mils
Elongation at Break	500%
Optimum Temp Range	40 °F–190 °F

Description	Cat. No.	Case of
Untreated	89495-444	24
Irradiated	89495-446	24



### VWR® APPAREL DISPENSING

Made to keep apparel clean and dust free. This product is constructed of durable acrylic and features a hinged lid for easy retrieval.

Pre-drilled for mounting on wall. Holds gowns or coats.

Description	Dimensions	Cat. No.
Apparel Dispenser	15W x 3.75D x 11.25H"	10031-860



### VWR® BULK DISPENSING

Extra-large capacity maximizes space and reduces restocking time. Features easy top loading and convenient front dispensing.

Acrylic construction with keyhole slots for wall mounting.

Description	Dimensions	Cat. No.
Cap and Shoe Cover Bulk Dispenser	12.375W x 4.5D x 20.625H"	10031-856

#### Material properties test descriptions

Test Item	Test Standard	Test Description
<b>Physical Properties</b>		
Particle Shedding (Helmke Drum)	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/m <sup>2</sup> )	ASTM D3776	Measurement of fabric mass per unit area (weight).
Thickness (mm)	ASTM D1777	Measurement of fabric thickness.
Ball Bursting Strength (Avg. lbs./in.)	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.)	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.
Tearing Strength (Avg. lbs./in.)	ASTM D2261	Measurement of the fabric's tearing strength by the tongue (single rip) procedure using a recording constant-rate-of-extension-type (CRE) tensile testing machine.
Trapezoid Tearing Strength (Avg. lbs./in.)	ASTM D4533	Measurement of the force required to continue or propagate a tear in the fabric.
Mullen Bursting Strength (Avg. PSI)	ASTM D3786	Measurement of the fabric's resistance to bursting using a hydraulic or pneumatic diaphragm bursting tester.
Abrasion Resistance (Avg. Cycles at which Fabric Shows Noticeable Wear)	ASTM D3884	Measurement of the fabric's abrasion resistance using a rotary platform, double-head (RPDH) tester.
Wyzenbeek Abrasion Mass Loss	ASTM D4157	Measurement of the fabric's abrasion resistance using a Wyzenbeek instrument with oscillating cylinder.
<b>Barrier Properties</b>		
Bacterial Filtration Efficiency	ASTM F2101	Measurement of the fabric's filtration efficiency using a challenge organism of Staphylococcus aureus.
Water Resistance	AATCC Method 42	Measurement of the degree to which the material is a barrier to liquids.
Synthetic Blood Penetration Resistance	ASTM F1670-08	Measurement of the resistance of chemical protective clothing materials to penetration by liquids.
<b>Comfort Properties</b>		
Water Vapor Transmission Rate (Avg. g/m <sup>2</sup> /24 hrs.)	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> )	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 breathability and comfort.
Air Permeability (cu. ft./min./sq. ft.)	ASTM D737	Measurement of air permeability to indicate breathability of the fabric.
<b>Skid-Resistance Properties</b>		
Coefficient of Friction	ASTM D1894	Measurement of the fabric's coefficients of starting and sliding over itself or other substances at specified test conditions.
<b>Chemical-Resistance Properties</b>		
Chemical Penetration Resistance	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.

# Take control of your production environment with Avantor®

Learn more at  
[VWR.COM/CE](https://www.vwr.com/ce)

Avantor® provides solutions for all your controlled environment needs. Whether you need to protect your staff, product or facility, Avantor has a solution.

We offer controlled environment products to support biotechnology, pharmaceuticals, microelectronic, food and beverage, medical devices and other industries.

Our broad production supply line has everything from wipes to disinfectants so your facility is covered from corner to corner. Our industrial and sterile garments line will keep your people covered from head to toe.



# Your total solutions provider for controlled environments

Contact your  
VWR Sales Rep  
**FOR MORE  
INFORMATION**

Working in controlled environments requires the highest degree of expertise, experience and diligence in order to ensure efficient and safe contamination control of both products and personnel. VWR® Protection Apparel offers five levels of protection — Basic, Advanced, Maximum, Signature and Irradiated — to obtain complete protection from head to toe. Our broad production supply line has everything from wipers to paper to disinfectants, ensuring you have everything you need to operate efficiently in your controlled environment.

## Apparel

- Boot Covers
- Bouffant Caps
- Coveralls
- Face Shields
- Frocks
- Gloves
- Glove Liners
- Goggles
- Hoods
- Isolation Gowns
- Lab Coats
- Masks
- Shoes and Clogs
- Shoe Covers
- Sleeves

## Production Supplies

- Adhesive Mats
- Brushes
- Buckets
- Cleanroom Covers
- Cleanroom Labels
- Cleanroom Mops
- Cleanroom Notebooks
- Cleanroom Paper
- Cleanroom Pens and Markers
- Cleanroom Tape
- Cleanroom Wipers
- Disinfectant - Sterile IPA
- Hand Care
- Sample Bags
- Sponges
- Storage Bins
- Swabs
- Tubing
- Tubing Connectors
- Wipers, Class 1-1000
- Wipers, Cleanroom Sterile
- Wipers, Pre-Saturated





# SCIENCE *DELIVERED*

From scientific discovery to scale-up and commercial delivery, you need mission-critical products, services and solutions on a global scale.

Avantor® offers global access to our own portfolio of trusted, quality brands and critical products through our premier delivery platform, VWR®. All of this, combined with infrastructure strategically located to help serve your specific needs, helps move science forward – fast. That's **science delivered**.

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