

The science and safety behind  
the white suits  
**Page 6**

A fresh look inside Avantor's  
Bridgewater Innovation Center  
**Pages 16-17**



# Focus on innovation

We understand that every stage of your production is essential. That's why we ensure success in driving big strategic projects, conducting research, and modeling customer challenges from small scale and on through pilot and production scale.

We accomplish this by focusing on innovation. Our Bridgewater Innovation Center is a technology-driven research environment where we collaborate with customers to provide customized solutions to their unique and complex bioprocessing challenges.

From breakthrough discovery to agile delivery of advanced products and services around the globe, we're here to help. You can count on our proven industry experience and strength in logistics to enable your success.



# Table of contents

## APPAREL

Protective Clothing  
Pages 4, 6, 7, 8

Protective Eyewear  
Page 5

Face Masks  
Page 8

Gloves  
Pages 9-10

Foot Protection  
Page 11

## CHEMICALS

High Purity Inorganics,  
Metals, and Catalysts  
Page 12

Purified Water  
Page 13

Avantor Chemical Portfolio  
Page 13

Acids, Solvents, and  
Chromatography Products  
Page 14

Bioprocessing Chemicals  
and Excipients  
Page 15

GMP-Produced IPTG  
Page 15

## SUPPLIES

Cleaning Supplies  
Pages 18-22, 25

Cleanroom Dispensers  
Page 21

Media Bags  
Page 22

Swabs  
Page 23

Cleanroom Paper  
Page 23

Single-Use Tubes,  
Fittings & End Caps  
Page 24

Silicone Tubing  
Page 25

Scalpels  
Page 26

Adhesive Mats  
Page 27

# Comfort and durability

## solutions for protection

### VWR® ESD MICRO DENIER SCRUB TOP WITH KNIT CUFF

- 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
- Color: Navy

Size	Cat. No.
XX-Small	76202-674
X-Small	76202-676
Small	76202-658
Medium	76202-660
Large	76202-662
X-Large	76202-664

Size	Cat. No.
XX-Large	76202-666
3X-Large	76202-668
4X-Large	76202-670
5X-Large	76202-672
6X-Large	76202-678

## solutions for protection

### VWR® ESD MICRO DENIER SCRUB PANTS

This style of scrub pants is widely used in pharmaceutical cleanroom operations.

- 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
- Color: Navy

Size	Cat. No.
X-Small	76202-680
Small	76202-682
Medium	76202-684
Large	76202-686
X-Large	76202-688

Size	Cat. No.
XX-Large	76202-690
3X-Large	76202-692
4X-Large	76202-696
5X-Large	76202-698
6X-Large	76202-700



These scrubs provide an excellent base-layer of protection for any cleanroom garment system. Made with sandwashed material, this lightweight micro-denier fabric is woven from 100% continuous-filament polyester to eliminate any source for lint.



# Comfort inspires compliance

solutions for protection

## VWR® SAFETY GLASSES

This new line of VWR Safety Glasses provides multiple options to suit the needs of everyone in your lab. Each style is color-coded for easy identification.

- Anti-scratch, anti-fog coating
- Provides 99.9% UV protection
- Impact-resistant clear polycarbonate lens

Description	Frame Color	Cat. No.
Ladies Pink Safety Glasses	Pink	76210-824
OTG, Fit Over Prescription Glasses	Navy	76210-732
Sport Safety Glasses	Smoke	76210-730
Sleek Safety Glasses	Blue	76210-826

NEW  
 Five unique options – visit [vwr.com](http://vwr.com) to **LEARN MORE!**



# Ideal for use in controlled environments

solutions for protection

## VWR® DISPOSABLE GOGGLES, STERILE

Individually bagged to provide optimum comfort for extended wear times.

- Two types of ventilation
- Produced under stringent conditions
- Monitored closely to ensure high quality
- Anti-fog and anti-scratch
- Fits over prescription glasses

Goggles come in two types of ventilation: indirect and direct. Produced under stringent conditions and 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. Ideal for use in controlled environments requiring sterile apparel.

Ventilation	Cat. No.
Direct	10770-146
Indirect	10770-152



# The science and safety behind the white suits

By Dr. Alex Bradley

Providing safer work environments through education, awareness, and training is a critical process; meanwhile navigating the broad landscape of industry standards, complex regulations, chemical cleaning, or biological safety requirements can be challenging.

When it comes to personal protective equipment (PPE) ensembles, the wide variety of options ranging from coveralls, sleeves, and shoe covers can make the selection of the right PPE difficult. Fortunately, industry advancements ranging from communication technologies, analytical capabilities, and material science allow for continuous improvement in the selection of PPE relative to workplace health and safety.

## TYVEK® PROTECTIVE APPAREL

All white suits may look the same, but only DuPont™ Tyvek® stands out where you need it most – on the job. Tyvek® offers unmatched protection, improved breathability, and better garment durability. Lighter than spunbonded-meltblown-spunbonded (SMS) and microporous film (MPF), Tyvek® fabric's durability advantage delivers consistently better barrier, even after wear and abrasion.

DuPont Personal Protection offers a comprehensive selection of clean-processed and sterile single-use clothing designed to support your controlled environment gowning needs. Tyvek® IsoClean® provides a barrier against dry particles, microorganisms, and nonhazardous liquids, for protection of the workers as well as the products. Tyvek® Micro-Clean® 2-1-2 delivers the particle barrier, durability, and comfort of Tyvek® with a unique blue color. With blue and white coverall color options, you can distinguish workers within multipurpose facilities. Color coding might be used to designate workers that are allowed in restricted areas or can perform certain tasks, or to easily identify team leaders or supervisors.



## PROSHIELD® 80 COVERALLS

DuPont™ ProShield® 80 coveralls are designed for industrial occupations that require protection from contact with blood and bloodborne pathogens. Depending on the task and degree of exposure anticipated, industry standards such as OSHA 1910.1030 for occupational exposure to blood or other potentially infectious materials are critical to help determine the appropriate PPE.

The manual (HHS Publication No. (CDC) 21-1112) for Biosafety in Microbiological and Biomedical Laboratories (BMBL) establish PPE guidelines. ProShield® 80 coveralls can be considered a part of an overall PPE ensemble following a thorough hazard assessment for the following occupations: lab testing, animal science, emergency response, and biohazard remediation.

## SAFESPEC™

Sometimes workers are faced with potentially hazardous chemical exposure. DuPont™ SafeSPEC™ is a digital, customer-focused product selector tool that allows users to search by hazard, industry, brand/fabric, design, seam, and certifications. Thousands of chemicals have been permeation tested against our fabrics, including our highest level of chemical protection, DuPont™ Tychem®. SafeSPEC™ also serves as a database for garment and accessory data, literature and videos, technical information, and frequently asked questions. Available on the web at [www.safespec.dupont.com](http://www.safespec.dupont.com) and as an app for your tablet or mobile phone, SafeSPEC™ is free of charge and accessible anytime and anywhere.



# Head to toe consistent cleanroom protection



Integrated hood and mask



Coverall



Sleeve



Boot cover

## TYVEK® ISOCLEAN® GARMENTS & ACCESSORIES

- Tyvek® IsoClean® single-use cleanroom garments and accessories provide the ideal balance of protection, durability, and comfort
- Sterile garments are individually packaged, gamma sterilized to an SAL of 10<sup>-6</sup>, and are fully traceable
- Clean-processed garments offer exceptionally low levels of particle shedding
- The unique, patented flash-spinning process of Tyvek® creates an inherent barrier to dry particles, microorganisms, and nonhazardous liquids

Size	Cat. No.	Case of
<b>Integrated Hood &amp; Mask</b>		
Universal	76188-370	100
<b>Coverall with Dolman Sleeves</b>		
Small	89127-240	25
Medium	89127-236	25
Large	89125-616	25
X-Large	89127-246	25
2X-Large	89127-212	25
3X-Large	89127-218	25
4X-Large	89127-224	25
5X-Large	89127-226	25
6X-Large	76187-508	25
7X-Large	76187-510	25

Size	Cat. No.	Case of
<b>Sleeves</b>		
Universal	89127-350	50 pair
Universal	89127-352	50 pair
Universal	89125-646	50 pair
Universal	89127-354	50 pair
<b>Boot Covers</b>		
Small	10016-100	50 pair
Medium	89127-340	50 pair
Large	89127-336	50 pair
X-Large	89129-686	50 pair

Additional options available. Visit [vwr.com](http://vwr.com) for a full product listing

DuPont™, the DuPont Oval Logo, and all products, unless otherwise noted, denoted with ® or ™ indicates Trademark of an affiliate of DuPont de Nemours, Inc.

© 2019 DuPont de Nemours, Inc. All rights reserved.

# Superior protection

## solutions for protection

### VWR® STERILE SLEEVES

- Excellent breathability and water vapor transmission rate
- Superior fluid and particulate barrier
- Lowest level of particle shedding
- Durable yet soft, cloth-like fabric
- Gamma irradiated to SAL of 10<sup>-6</sup>
- Color: White



VWR® Sterile Sleeves are manufactured from a specially formulated breathable microporous fabric that provides significant fluid and barrier protection. Garments exhibit excellent water vapor transmission to optimize user comfort.

Sleeves feature elastic openings and sonically welded seams. They are available in two versions: with thumb loops or without.

Sleeves 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. Products are validated through independent lab testing.

Size	Length, cm (in.)	Cat. No.
<b>Sterile Sleeves without Thumb Loop</b>		
Universal	49.5 (19½)	414004-510
X-Large	54.6 (21½)	414004-511
<b>Sterile Sleeves with Thumb Loop</b>		
Universal	49.5 (19½)	76169-446
X-Large	54.6 (21½)	76169-448

# Protection and comfort

## solutions for protection

### VWR® MAXIMUM PROTECTION CLEANROOM FACE MASKS

Masks offer superior bacteria and particulate protection, and are available in multiple styles to ensure security and comfort throughout extended use. They feature three-ply construction for superior particle and bacterial filtration efficiency.

- Superior protection against bacteria and particulates
- Highly breathable and fluid-resistant
- Low particle shedding
- Soft and hypoallergenic
- Malleable noseband ensures custom, secure seal



Description	Color	Cat. No.
Mask with ear loops	Blue	414004-667
Mask with ties	White	414004-669



# Textured for a reliable grip



## solutions for protection

### VWR® CERTICLEAN® CLASS 100 LATEX GLOVES

Ambidextrous, powder-free gloves designed to provide comfort and tactile sensitivity.

- Ambidextrous, beaded cuff
- Powder free, silicone free
- Natural rubber latex
- Low particle count
- Specialized manufacturing process
- Glove color: Natural
- Case of 1000

Size	Cat. No.
Small	40101-142
Medium	40101-144
Large	40101-154
X-Large	40101-156

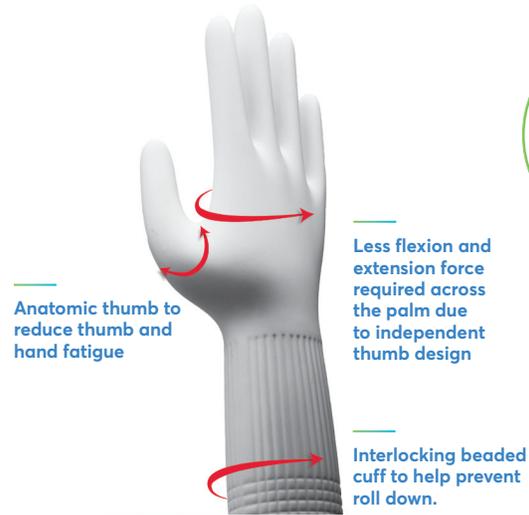
Length: 25.4 cm (10")

Size	Cat. No.
Small	40101-158
Medium	40101-160
Large	40101-162
X-Large	40101-164

Length: 30.5 cm (12")



# A mold unlike any other



Visit [vwr.com/cardinalgloves](http://vwr.com/cardinalgloves) to view our full portfolio.

There are important differences in controlled environment glove manufacturing and technology that can impact the way a glove feels and performs. We believe that the glove mold used makes all the difference in the fit and feel of the glove.

The Cardinal Health™ glove mold features an independent thumb design — meaning the finger placement replicates the anatomical position of a resting hand — allowing for natural, comfortable movement.

#### Esteem™ CP

Glove Size	Cat. No.	Glove Size	Cat. No.
5.5	PH2Y72PL55	8.5	PH2Y72PL85
6	PH2Y72PL60	9	PH2Y72PL90
6.5	PH2Y72PL65		
7	PH2Y72PL70		
7.5	PH2Y72PL75		
8	PH2Y72PL80		

Visit [vwr.com/cardinalgloves](http://vwr.com/cardinalgloves) to view our full portfolio.



One study shows that similar displacements of the thumb require less force with gloves featuring an independent thumb than those without an independent thumb feature<sup>1</sup>.

<sup>1</sup> Bennet, M. A. & Tekamp, D. A. Surgical Glove Comparison Testing. Stress Engineering Services. February 2012.

© 2019 Cardinal Health. All Rights Reserved. CARDINAL HEALTH, the Cardinal Health LOGO and ESSENTIAL TO CARE are trademarks of Cardinal Health and may be registered in the US and/or in other countries. All other marks are the property of their respective owners.

# Ultimate barrier against harmful exposures

## MICROFLEX® 93-850 ULTIMATE BARRIER DISPOSABLE NITRILE GLOVES

2X more durability and chemical splash resistance than leading nitrile gloves.\*

- 1 2X more chemical splash protection\*
- 2 Highest barrier quality & consistency\*\* (low 0.40 AQL)
- 3 Made with TNT™ Chemical Splash Resistance Technology for soft, durable protection against a wide range of chemicals
- 4 Silicone-free design is paint and finish process friendly

Size	Cat. No.
X-Small	76169-908
Small	76169-910
Medium	76169-912
Large	76169-914
X-Large	76169-806
2X-Large	76169-808

Length: 240 mm (9.5")

\*Based on Ansell durability pull test data, when compared to performance of disposable nitrile gloves of similar thickness. Based on EN 374 and ASTM F739 chemical permeation test data, when compared to performance of disposable nitrile gloves of a similar thickness.

\*\*Microflex 93-850 0.40 AQL is lower than the AQL of other known industrial and medical grade disposable gloves.

NEW

Visit  
[vwr.com/ansell](http://vwr.com/ansell)  
to **LEARN MORE!**



**TNT™**  
Chemical Splash  
Resistance Technology

## solutions for protection

### VWR® SOFT NITRILE EXAMINATION GLOVES

Ideal for all industrial and laboratory tasks, these fully textured, powder-free gloves with beaded cuffs are made of premium compounded nitrile for tactile sensitivity and comfort.

- Ambidextrous
- Powder- and Latex-free
- Textured
- Beaded cuffs
- Gloves protect hands from a broad range of chemicals
- Color: Blue
- Size: 22.9 cm (9")

Size	Cat. No.
X-Small	89038-267
Small	89038-268
Medium	89038-270
Large	89038-272
X-Large	89038-274





## High level of protection



### solutions for protection

#### VWR SIGNATURE™ BOOT COVERS MADE WITH DUPONT™ TYVEK® MATERIAL

- High level of protection and comfort for all cleanroom applications
- Nonwoven material protects against dry particulates and nonhazardous liquids
- Soles made from PVC, coarsely textured interior prevents slipping inside and outside the garment
- 45.7cm (18") high upper with elastic at leg openings
- Supplied with ankle ties
- Case of 100
- Color: White

Size	Cat. No.
Medium	89013-154
Large	89013-156
X-Large	89013-158



## Long lasting abrasion and skid-resistance



### solutions for protection

#### VWR® ADVANCED PROTECTION ANTI-SKID SHOE COVERS

Highly durable shoe covers ensure long-lasting abrasion and skid resistance.

- Specially formulated polypropylene/polyethylene microporous film
- Excellent fluid and barrier protection
- Standard or static-dissipative formats
- High coefficient of friction to provide excellent traction
- Non-linting
- Color: Blue

Size	Cat. No.	Case of
<b>Standard</b>		
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
<b>Static Dissipative</b>		
Universal	414004-644	300
X-Large	414004-645	300

# Element expectations exceeded



## HIGH-PURITY INORGANICS, METALS, AND CATALYSTS

Thermo Fisher Scientific offers a broad range of high-quality Alfa Aesar™ chemical solutions in stock and ready to ship. Quality products with expertise that can make a difference.

Alfa Aesar fine chemical solutions can be customized to meet your exact specifications. And we're here to help with our experience and knowledge when you need it, so you can focus on getting great results.

Count on us for:

- High-purity & high-quality Alfa Aesar chemical solutions
- Competitive pricing for large and small quantities
- Quick delivery and great service

Description	Size	Cat. No.
Aluminum chloride, anhydrous, powder, 99%	100g	AAAL18489-22
Ammonium formate, 99%	50g	AA14517-18
Ammonium hydroxide, 28% NH <sub>3</sub>	500ml	AAAL13168-AP
Cesium carbonate, 99% (metals basis)	5g	AA12887-06
Cobalt(II) chloride hexahydrate, 98%	50g	AAAA16346-18
Copper(I) chloride, 97%	100g	AA11871-22
Hydrogen tetrachloroaurate(III) trihydrate, ACS, 99.99% (metals basis), Au 49.0% min	1g	AA36400-03
Hydroxylamine hydrochloride, 99%	100g	AAAA15398-22
Iron(II) chloride, anhydrous, 99.5% (metals basis)	5g	AA31141-06
Lithium bromide, anhydrous, 99% min	100g	AA13408-22
Lithium chloride, anhydrous, 99%	250g	AA10515-30
Magnesium chloride, anhydrous, 99%	1kg	AA12315-A1
Magnesium sulfate, anhydrous, 99.5% min	500g	AA33337-36
Nickel(II) chloride hexahydrate, 98%	250g	AAAA14366-30
Nickel(II) nitrate hexahydrate, 98%	100g	AAAA15540-22
Potassium carbonate, anhydrous, 99%	500g	AAAA16625-36
Potassium iodide, 99%	50g	AAAA12704-18
Silver nitrate, ACS, 99.9+% (metals basis)	1000g	AA11414-36
Sodium acetate, anhydrous, 99%	250g	AAAA13184-30
Sodium thiosulfate, anhydrous, 99%	500g	AAAA17629-36
Tin(II) chloride, anhydrous, 98%	100g	AAAA16202-22
Zinc chloride, anhydrous, 98+%	100g	AAAA16281-22
Zinc nitrate hexahydrate, 99% (metals basis)	500g	AA12313-36

Shop the entire range at [vwr.com/alfa](http://vwr.com/alfa)



# Not all water is created equal

## AQUAPUR PURIFIED WATER

### WATER, WATER EVERYWHERE...BUT DOES IT REALLY MEET USP SPEC?

Not all water is created equal! It's easy to make water that meets USP spec today...but what about after it sits on a shelf for 2 weeks, 2 months or 12 months? Our testing of major brands of packaged purified water show a high amount of microbial growth which can affect TOC and other parameters. Decon's proprietary manufacturing process ensures that our AquaPur Purified Water meets specifications when you use it.



### Purified Water

- Meets USP/EP specs
- Made in FDA-registered / cGMP facility
- Validated system incorporating deionization, UV, and ultrafiltration
- Maintains microbial spec through expiration date

### Sterile Purified Water

- Meets USP specs
- Double-bagged, gamma-irradiated
- Meets USP WFI spec for sterility and endotoxin
- For applications in lab or production environments that require sterile purified water
- Lot Specific Document detailing testing shipped with each case

Description	Size, L (gal.)	Cat. No.
AquaPur Purified Water	3.8 (1)	71003-548
AquaPur Purified Water	20 (5)	71003-550
AquaPur Purified Water	210 (55)	71003-552
AquaPur ST Sterile Purified Water	3.8 (1)	71003-690



## The Avantor® portfolio of chemicals: delivering results from beaker to bulk

Application	J.T.Baker®	Macron Fine Chemicals™	VWR Chemicals BDH®	VWR Bioprocess Chemicals	VWR Collection Chemicals
Analytical - Chromatography	X	X	X		X
Analytical - Spectroscopy	X	X	X		
Analytical - Electrochemistry	X	X	X		X
Clinical - Histology/Hematology	X	X	X		X
Biopharma - Small Molecule R&D	X	X	X	X	
Biopharma - Large Molecule R&D	X	X	X	X	
Biopharma - Upstream Manufacturing	X	X		X	X
Biopharma - Downstream/Fill & Finish	X	X		X	X
Biopharma - Quality Control	X		X		
Environmental - Field Testing	X		X		
Environmental - Lab Testing	X	X	X		X
Microelectronics	X				

Request your free copy of the new 2019 Avantor portfolio of chemicals catalog today - visit [vwr.com/AvantorChemicalsCatalog](http://vwr.com/AvantorChemicalsCatalog)



# Avantor J.T.Baker® brand: Trusted for the world's most demanding applications for over a century

The Avantor J.T.Baker® brand has stood for excellence along every step of our customers' processes—from the laboratory to full-scale production—for over a century. Choose from a range of high-purity acids, solvents, and chromatography products that provide the quality you want for the results you need.



## J.T.BAKER® HIGH-PURITY ACIDS

Offered in four distinct levels of purity from general use to trace-metal analysis

Description	Size	Packaging	Cat. No.
Acetic Acid, Glacial, BAKER ANALYZED® A.C.S. Reagent, (Aldehyde Free)	4 L	Poly Bottle	JT9508-6
Hydrochloric Acid, ULTREX® II Ultrapure Reagent	500 mL	Fluoropolymer Bottle	JT6900-5
Hydrochloric Acid, 36.5-38.0%, BAKER INSTRA-ANALYZED® Reagent	2.5 L	Clear PVC Coated Glass Bottle	JT9530-33
Hydrofluoric Acid, 48.0-51.0%, BAKER ANALYZED® A.C.S. Reagent	4 L	Poly Bottle, Bagged	JT9560-6
Nitric Acid, 69.0-70.0%, BAKER INSTRA-ANALYZED® Reagent	2.5 L	Clear PVC Coated Glass Bottle	JT9598-5
Nitric Acid, ULTREX® II Ultrapure Reagent	500 mL	Fluoropolymer Bottle	JT6901-5
Phosphoric Acid, BAKER ANALYZED® A.C.S. Reagent	2.5 L	Clear Glass Bottle	JT0260-5
Perchloric Acid, 70%, BAKER INSTRA-ANALYZED® Plus, for Trace Metal Analysis	500 mL	HDPE Bottle	JT9359-1
Sulfuric Acid, BAKER ANALYZED® A.C.S. Reagent	2.5 L	Clear PVC Coated Glass Bottle	JT9681-33
Sulfuric Acid, BAKER INSTRA-ANALYZED® Reagent, Low Selenium, for Trace Metal Analysis	2.5 L	Clear PVC Coated Glass Bottle	JT9673-33

## J.T.BAKER® LC/MS SOLVENTS

High purity to provide the performance needed with minimal risk of contaminants

Description	Size	Packaging	Cat. No.
Acetonitrile, BAKER ANALYZED® LC/MS	4 L	Narrow Mouth Amber Glass Bottle	JT9829-3
Acetonitrile, BAKER ANALYZED® ULTRA LC/MS	1 L	Narrow Mouth Flint Bottle	JT9853-2
Methanol, BAKER ANALYZED® LC/MS	4 L	Narrow Mouth Amber Glass Bottle	JT9830-3
Methanol, BAKER ANALYZED® ULTRA LC/MS	1 L	Narrow Mouth Flint Bottle	JT9863-2
Water, BAKER ANALYZED® LC/MS	4 L	Narrow Mouth Amber Glass Bottle	JT9831-3
Water, BAKER ANALYZED® ULTRA LC/MS	1 L	Narrow Mouth Flint Bottle	JT9823-2
Acetonitrile-0.1% Trifluoroacetic Acid LC/MS	4 L	Narrow Mouth Amber Glass Bottle	JT9835-3
Water-0.1% Trifluoroacetic Acid, LC/MS	4 L	Narrow Mouth Amber Glass Bottle	JT9836-3
Acetonitrile-0.1% Formic Acid LC/MS	4 L	Narrow Mouth Amber Glass Bottle	JT9832-3
Water-0.1% Formic Acid LC/MS	4 L	Narrow Mouth Amber Glass Bottle	JT9834-3

## J.T.BAKER® CHROMATOGRAPHY PRODUCTS

High-performance solid phase extraction columns, media, and other equipment

Description	Cat. No.
BAKERBOND® Wide-Pore WP Octyl (C8) Column, Analytical	JT7105-1
BAKERBOND® Narrow-Pore Prep Packings	JT7025-1
Baker-flex® Precoated Flexible TLC Sheets, 200µm Thickness, F254, 25 x 75mm Plate, Silica Gel Coating	JT4463-2
Baker-flex® Precoated Flexible TLC Sheets, 250µm Thickness, F254, 25 x 75mm Plate, Silica Gel Coating	JT4449-2
BAKERBOND® SPE Columns, Reversed Phase, Octadecyl, 6 mL	JT7020-6
<b>Extraction Disks, 50 mm</b>	
Normal Water Samples	JT8055-6
Water-Samples, Polar to Non-Polar Analytes	JT8055-7
Diquat/Paraquat Samples	JT8057-6
Hydrocarbons/Oil & Grease	JT8060-6

# Bioprocessing chemicals, more product solutions

solutions for production

## VWR BIOPROCESSING CHEMICALS AND EXCIPIENTS

Avantor manufactures cGMP biological buffers, chemicals, and biochemicals that are suitable for bioprocessing and excipient use. Available in convenient standard pack sizes as well as custom packaging, VWR Bioprocessing Chemicals and Excipients are backed by our analytical laboratory and regulatory support, and change management processes.

Additionally, our diverse sourcing capabilities, dedicated manufacturing and service teams, and audit support of raw materials manufacturers help to provide our customers with the resources they need and a transparent, robust supply chain to help meet the needs of highly regulated markets.

### Other features:

- BSE-/TSE-free
- Custom testing available on select products
- Three-lot sample availability

Browse the complete product offering at [vwr.com/bioprocesschemicals](http://vwr.com/bioprocesschemicals)

Browse our  
**EXPANDED  
LINE**



# Minimize risk with GMP-produced chemicals



## AVANTOR J.T.BAKER® GMP-PRODUCED IPTG

Empower your recombinant protein production process with new, GMP-produced J.T.Baker® brand IPTG. Manufactured and purified under current good manufacturing practice (cGMP) conditions and Avantor's quality processes including Management of Change (MOC) notification, J.T.Baker® brand IPTG meets regulatory requirements while minimizing lot-to-lot variability and improving consistency of protein expression. J.T.Baker® brand GMP-produced IPTG is bioburden tested with controlled low trace metal content.



Size	Packaging	Cat. No.
10 g	Wide Mouth Polyethylene Bottle	JTV264-01
100 g	Wide Mouth Polyethylene Bottle	JTV264-02
1 kg	Polyethylene Pail, Screw Top	JTV264-05

# A fresh look inside Avantor's Bridgewater Innovation Center

In 2017, Avantor opened its Bridgewater Innovation Center in Bridgewater, New Jersey (USA). In a recent interview, Avantor's Dr. Ashish Kulkarni, Chief Technology Officer, and Dr. Nandu Deorkar, Vice President, R&D, provided an informative update on the facility's growth, key accomplishments, and plans for the future.



**?** **The Bridgewater Innovation Center has been operational for about two years now. Can you tell us about the facility and its capabilities?**

Avantor's Bridgewater Innovation Center is a technology-driven research and collaboration environment where we work closely with customers to solve their bioprocessing problems. Our unique innovation framework supports solutions for science's most difficult challenges. We succeed in driving big strategic projects, conducting research, and modeling customer challenges from the smallest scale, through pilot and production scale.

Our entrepreneurial scientists have the drive, skills, and tenacity to set science in motion and overcome the obstacles to success. The customers we serve here at Bridgewater notice and value this mindset when they see our scientists ready to drill down into understanding real-world problems.

**?** **Has anything changed since the opening?**

We've added fermentation capabilities for bioproduction and more resources to work on downstream processing challenges and excipients. We've also increased bioreactor capacity so we can do the kind of scale-up experiments and simulations needed to meet the evolving requirements of our customers.

**?** **Beyond life sciences, is the Bridgewater Innovation Center involved with other specialty areas?**

We enhanced our capabilities to complete more filtration work in the semiconductor industry for customers who need help dealing with issues such as trace metal limits. Customers expect



To read more,  
please visit  
[VWR.COM/  
BRIDGEWATER](https://www.vwr.com/bridgewater)

Avantor to stay on top of these challenges, so we're committed to innovation in the semiconductor industry as well.

More and more biopharma and bioprocessing customers are also paying significant attention to the impact of trace metals on their process outcomes, so our expertise in this area is beneficial for life science applications.

**How have customers embraced your work at Bridgewater?**

We recently helped a customer with a persistent process problem associated with the clumping and flowing of dry materials being fed into bioproduction systems.

Our innovative solution resulted in nearly doubling the revenue for that customer, as well as paving the way for similar improvements with other customers.

**Why did Avantor choose to place an innovation center in Bridgewater?**

Our Bridgewater facility is housed within the New Jersey Center of Excellence, a 110-acre life sciences campus located in the heart of the northeast U.S. bioscience technology corridor. It's an easy drive for many of our current and prospective customers, from start-ups to major global biopharma firms. This accessibility is crucial to our collaborative model.

**What do you feel is required for successful innovation in biopharma?**

Biopharma companies are becoming more and more data intensive. The digitalization of science is creating many new opportunities given the amount of data being generated. In part, productivity in research needs to improve because the cost of bringing new drugs to market is increasing very rapidly.

In fact, there is a rise in the prominence of data generation and digital channels across the life science industry. We can provide advanced data integration and analytics-enabled solutions for scientific development.

**What do you see as the main challenges facing biopharma manufacturers today?**

As far as antibody- and protein-related drugs are concerned, improving productivity and managing costs will continue to be more and more important. Simplifying processes and making changeovers easier and more efficient are clear examples of ongoing improvement efforts for biopharma manufacturers.

There are more than 450 companies involved in the cell and gene therapy segment at the moment and the number seems to grow daily. When we look at this application, we start looking ahead for new, RNA-based therapies that may help different challenges.

At Bridgewater, we can collaborate with customers working on advancing cell and gene therapy programs, whether they are in start-up stages of research and development or at the point of scaling up to commercial manufacturing.

**What other exciting biopharma innovations can we expect to see in the next five to ten years?**

When thinking about the way different fields are converging, the lab of the future will look very different. It's going to be very exciting! Technologies like artificial intelligence, natural language processing, and machine learning are going to change the way science can be done.

Another field which will move from theoretical research to science fact is regenerative medicine. As your arteries weaken, you can replace them with gene-engineered arteries. In addition, the field of xenotransplants focuses on replacement organs for humans. We're not there yet, but these various technologies are evolving due to the explosion of start-ups worldwide.

Someone needs to bring these innovations together to help companies commercialize their technologies. Our innovation framework enables us to bring customized solutions to our customers' unique and complex challenges, and our Bridgewater Innovation Center is a key element of this framework.

# An all-in-one solution

## CONTEC® COMPACT BUCKET SYSTEM AND VERTIKLEAN® MAX™ HANDS-FREE MOP REMOVAL TOOL

Contec's autoclavable Compact Bucket System is an all-in-one solution to make cleaning and disinfecting easier and more efficient.

Available with either two or three autoclavable polypropylene buckets, or with three stainless steel buckets, and a choice of a standard or utility cart handle. The utility handle allows two small buckets (6L) or one large bucket (15L) to be positioned on the handle, providing additional storage for extra supplies such as clean mop heads, solution spray bottles, wipes, and other items as needed.

The VertiKlean MAX Hands-Free Mop Head Removal Tool is an accessory that can be bought separately to add to the Compact Bucket System. When a used mop head needs to be removed, the user simply positions the mop head on plate, pushes down slightly and the mop head removes from the frame, dropping into a disposable bag.



### COMPACT BUCKET SYSTEM

Description	Details	Cat. No.
With Polypropylene Buckets, Standard Handle, and One Debris Screen	2 x 15 L (3.9 gal.)	76199-900
With Polypropylene Buckets, Utility Handle, and One Debris Screen	3 x 15 L (3.9 gal.)	76199-902
With Polypropylene Buckets, Standard Handle, and Two Debris Screens	3 x 15 L (3.9 gal.)	76199-904
With Polypropylene Buckets, Utility Handle with Two 6 L (1.6 gal.) Buckets, and Two Debris Screens	3 x 15 L (3.9 gal.)	76199-906
With Stainless Steel Buckets and Standard Handle	3 x 10 L (2.6 gal.)	76199-930

Description	Details	Cat. No.	Case of
VertiKlean MAX Hands-Free Mop Head Removal Tool and Waste Bag Holder	—	76311-188	1
Cleanroom Disposal Bag	66 x 45.7 cm (26 x 18")	76313-918	20
Cleanroom Disposal Bag, Irradiated (25-50 kGy)	66 x 45.7 cm (26 x 18")	76313-920	20



# Superior quality for aseptic environments

## solutions for production

### VWR® SPEC-WIPE® 3 STERILE WIPER

Sterile wiper for aseptic environments where bacteria, particulate, and extractable levels are critical concerns.

- 45% polyester and 55% cellulose
- Hydroentangled to minimize fiber and particle generation
- Mechanically bonded
- Case of 500



W x L cm, (in.)	Cat. No.
30.5 x 30.5 (12 x 12)	21914-777

# Micronova's modular cleaning system



### M-ZONE® FLAT MOPS

Lightweight, easy-to-use mopping system. Whether wet or dry mopping, the M-Zone FlatMop has a size and fabric finish to match your application.

Description	Cat. No.
FlatMop, PolySorb 9"	89498-074
FlatMop, Polysorb 14"	89498-078
FlatMop, Polysorb 18"	75848-692
FlatMop, MegaTex 14"	76214-286



### MEGAWRINGER

Lightweight, ergonomic downward press unit requiring minimum operator effort. Designed for Micronova's M-Zone FlatMops.

Size, in.	Weight	Cat. No.
22L x 7D x 9H	5 Lbs.	76299-864



### BUCKET BINDERS

Unique, space-saving system that does away with the need for bulky carts and frames. Secures up to 3 buckets for controlled cleaning.

Description	Cat. No.
<b>Bucket Binder Double Bucket Kit</b>	
Blue and Yellow Buckets/One set of Bucket Binders	76289-876
<b>Triple Bucket Kit</b>	
Blue, Red, and Yellow Buckets/Two sets of Bucket Binders	76289-878





# Essential cleaning tools for critical environments

## PERFEX TRUCLEAN MOPPING SYSTEMS

TruCLEAN Mopping Systems effectively capture and isolate contaminants, ensuring the delivery of pure cleaning agents. High-quality, stainless steel components and temperature resistant polypropylene buckets suitable for large and small area cleanrooms of any grade. Designed to be easy to use and maintain while delivering the cleaning performance you expect, time and time again.

- Prevent dangerous cross-contamination with multi-bucket mopping systems
- Compatible with gamma, ethylene oxide, and autoclave sterilization

Color*	Cat. No.
<b>TruCLEAN Triple Bucket Mopping System</b>	
Red	22940-012
White	22940-015
Blue	22940-014
<b>TruCLEAN 2</b>	
Red	89095-990
Blue	89095-992

\*Also available in green and yellow.



## PERFEX TRUCLEAN SPONGE AND FIBER MOPS

Designed for use in cleanroom environments with ultra-low particulate level requirements. TruCLEAN Sponge Mop is ideal for applying cleaning and disinfecting agents to floors, walls, and ceilings. TruCLEAN Sponge and Fiber Mops combine performance with high-absorption for superior cleaning capabilities.

- Excellent surface coherence, abrasion- and tear-resistant
- Compatible with gamma, ethylene oxide, and autoclave sterilization
- Chemical and microbial resistance

Description	Cat. No.
TruCLEAN clean room mop	89096-038
TruCLEAN microfiber mop	89096-040
TruCLEAN anti-microbial mop	89096-036
TruCLEAN sponge mop	22940-023
TruCLEAN mop cover	22940-191



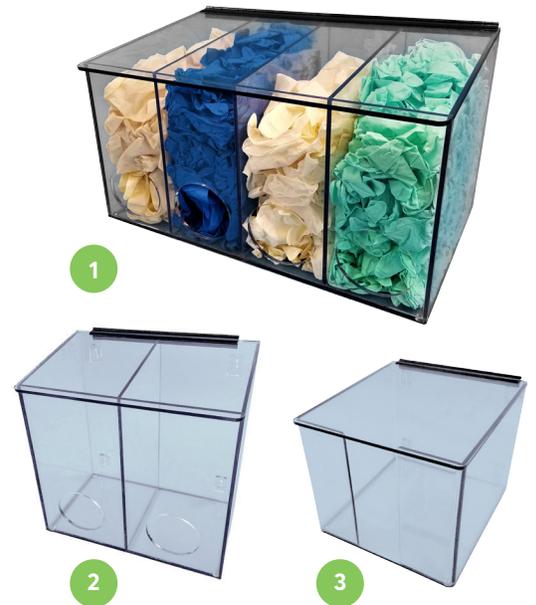


# Designed for use in controlled environments

## DISPENSERS TO ORGANIZE AND PROTECT YOUR PPE AND CLEANROOM SUPPLIES

Organize and maintain your personal protection equipment and cleanroom supplies. To see our full line of products, visit [vwr.com](http://vwr.com) and enter "S-Curve" in the search bar.

- Designed to organize supplies and protect from contamination
- Maximize space utilization in gowning room and production areas
- Keep supplies easily accessible and identifiable with clear dispensers
- Easy wall mounting and removal for cleaning
- All dispensers are available in chemical-resistant PETG material



1

2

3

- 1 Four-compartment glove dispenser
- 2 Two-compartment dispenser
- 3 Dispenser for lab coats

Description	Cat. No.
4-Compartment Glove Dispenser	98106-922
2-Compartment Dispenser with Front Access	10828-380
Dispenser for Lab Coats, Smocks, and Frocks	10027-890

# Ideal for use with cleanroom wipers

## solutions for production

### VWR® STERILE 70% ISOPROPANOL

- Filtered to 0.2 µm and induction sealed to assure sterility
- Contains 70% USP grade isopropanol and 30% USP grade deionized water
- Double-bagged and gamma-irradiated to a Sterility Assurance Level of 10<sup>-6</sup>
- Ideal for use with sterile cleanroom wipers
- Excellent for wipedown of isolators, cabinets, and laminar flow hoods
- Each bottle is lot coded and has an expiration date
- Can be used on gloved hands in sterile environments

Description	Size	Cat. No.
Bottle	3.8 L (1 gal.)	89108-162
Trigger Spray Bottle	946 mL (32 oz.)	89499-420
Trigger Spray Bottle	473 mL (16 oz.)	89108-160





# Decontamination for countless applications

## DECON-AHOL® 70% ISOPROPYL ALCOHOL SOLUTION

Veltek Associates offers this solution with 70% isopropyl alcohol and 30% water. It's ideal for decontamination of gloves, surfaces, carts, countertops, process lines, and for many other applications.

- Prefiltered to 0.2 µm
- Completely traceable and validated for sterility and shelf life
- Sterile WFI solutions use USP Water for injection, are gamma irradiated
- Solution available in nonsterile, sterile, and sterile WFI formats
- Nitrogen-propelled aerosol does not permit aspiration of the room air into reservoir



Description	Size, mL (oz.)	Sterility	Cat. No.
Aerosol Mist Spray	325 (11)	Sterile WFI	14003-270
Inverta Spray	325 (11)	Sterile WFI	14003-268
Squeeze Bottle, Individually packed	473 (16)	Sterile WFI	14003-274
Stream	325 (11)	Sterile WFI	14003-276
Trigger Spray	473 (16)	Nonsterile	14003-252
Trigger Spray	473 (16)	Sterile WFI	14003-278
Trigger Spray	946 (32)	Sterile WFI	14003-282

Please visit [vwr.com](http://vwr.com) to view all sizes and styles. These products are not available in Canada. Please contact your VWR Sales representative to learn about similar options in your region.

# Compliance was never so easy



## TSB MEDIA BAGS FOR VERIFICATION OF YOUR ASEPTIC TECHNIQUE ACCORDING TO USP <797>

Media Bag™ by Hardy Diagnostics is ideal for verifying aseptic technique of pharmacists, nurses, or pharmaceutical manufacturing technicians. Available in both 100ml fills as well as larger 700ml fill bags. Media Bag has both a needle port and spike port, is terminally autoclaved for high sterility assurance, and features a hang notch on the top allowing the technician to hang the bag.

- The Media Bag has both a spike-port and needle-port
- Quality tested to USP <71> Standards
- Growth promotion testing performed on each lot of media
- Tryptic Soy Broth (TSB) is manufactured in an ISO 13485 Facility



Description	Size, mL	Packaging info	Cat. No.
TSB, USP	700	Pack of 5	75846-314
TSB, USP	100	Pack of 10	75814-002



# Ideal for use in controlled environments

solutions for production

## VWR® CRITICAL SWAB® SWABS

Precisely formulated in three unique materials:

Foam, cotton, and foam-over-cotton

### Foam Head Swabs

- Withstand most widely used solvents
- Nonabrasive

### Cotton Head Swabs

- Highly absorbent, USP-grade cotton
- Lintless formulations reduce contamination
- Economical



Swabs	Head, W x L, mm (in.)	Handle, W x L, mm (in.)	Swab Length, mm (in.)	Cat. No.
<b>100ppi Open-Cell Polyurethane Foam Head and 100% Virgin Polypropylene Handle</b>				
Large, Rectangular	13.5 x 25.4 (0.531 x 0.999)	5 x 130 (0.195 x 5.100)	152.3 (5.996)	89031-286
Paddle-Shaped, Flexible	4.8 x 15.1 (0.188 x 0.594)	3.1 x 152 (0.120 x 5.995)	167.4 (6.591)	89031-276
<b>100ppi Polyurethane Foam Head and Wood Handle</b>				
Medium	4.8 x 17.4 (0.188 x 0.687)	2.5 x 152 (0.100 x 5.974)	166.7 (6.563)	89031-274
<b>Reticulated Foam Head and Extra-Rigid, Glass-Filled Polypropylene Handle</b>				
Cone-Shaped	3.9 x 17.5 (0.154 x 0.688)	2.5 x 83 (0.100 x 3.260)	100.3 (3.949)	89031-282
Extended Length	3.6 x 25.4 (0.140 x 1.000)	2.5 x 82.8 (0.100 x 3.260)	108.2 (4.260)	89031-284
<b>Two Lintless Cotton Tips and Paper Handle</b>				
Double	4.4 x 15 (0.173 x 0.591)	2.5 x 78 (0.100 x 3.071)	93.0 (3.661)	89031-290
Double, Slim	3.2 x 14 (0.126 x 0.551)	1.5 x 75.5 (0.059 x 2.972)	89.5 (3.524)	89031-292
<b>Cotton Tip and Wood Handle</b>				
Small	4.8 x 15.9 (0.188 x 0.624)	2.5 x 152 (0.100 x 6.000)	162.9 (6.413)	89031-270
Large	5.9 x 17.4 (0.234 x 0.687)	2.5 x 152 (0.100 x 5.995)	164.5 (6.476)	89031-272

Shop [vwr.com](http://vwr.com) for additional sizes and more information.

# Ideal for documentation in critical environments

solutions for production

## VWR® CLEANROOM PAPER

The cleanroom paper is ideal for documentation in critical environments, where very low particle and ESD generation is important. Available in latex or latex-free variants in a variety of colors and sizes.



Size, in.	Color	Weight, lbs.	Cat. No.
<b>Latex Paper</b>			
11 x 17	White	22	89422-724
11 x 17	White	28	89422-734
<b>Latex-Free Paper</b>			
8.5 x 11	White	28	89422-740
8.5 x 14	White	22	89422-732
11 x 17	White	22	89422-728
8.5 x 11	Blue	22	10769-742
8.5 x 11	Canary	22	10769-744
8.5 x 11	Green	22	10769-746
8.5 x 11	Pink	22	10769-748

Please visit [vwr.com](http://vwr.com) for a complete listing of sizes, colors, and styles.

**AVANTOR OMNITOP™ ASSEMBLIES, PRE-STERILIZED SINGLE-USE SAMPLE TUBES®**

Convenient device can be used to obtain fluid samples. Each tube comes with a pre-attached 0.2µm vent filter and 18" of tubing (C-Flex®, TYGON®, silicone or PharMed®).

- Unique cap design allows for complete customization
- Ability to use different ID and OD tubing diameters
- Wide selection of tubing materials
- Easily configured with virtually any type of tubing
- Cost effective
- Reduced assembly and installation time
- Eliminate cleaning validation
- Flexible manufacturing
- Design permits quick delivery on small lots
- Closure system can be used with various glass bottles
- Available individually packaged or configured in manifold
- Available with or without internal dip tubes; facilitates removal of fluid inside



OmniTop 15 mL Sample Tubes	Material	Cat. No.
OmniTop Assembly, C-Flex®, Gamma	Polypropylene	75840-758
OmniTop Assembly, C-Flex®, Silicone Dip Tube, Gamma	Polypropylene	75840-754
OmniTop Assembly, C-Flex®, Seal and Trim, Gamma	Polypropylene	75840-760
OmniTop Assembly, C-Flex®, Silicone Dip Tube, Seal and Trim, Gamma	Polypropylene	75840-756
OmniTop Assembly, C-Flex®, Gamma	Polystyrene	75840-766
OmniTop Assembly, C-Flex®, Silicone Dip Tube, Gamma	Polystyrene	75840-762

Visit [vwr.com](http://vwr.com) for more sizes.

**AVANTOR STERILENZ®-II/AT PRE-GASKETED FITTINGS**

Avantor SterilEnz®-II/AT Sanitary Connectors are designed with an integrated, platinum cured, medical grade silicone gasket mechanically attached to the fitting face. SterilEnz increases manufacturing efficiencies by reducing connection time, preventing gasket misalignment, and removing potential contamination risks. Certified free from any animal derived components and available in a range of sizes, SterilEnz®-II/AT Fittings are made from inert polypropylene suitable for autoclaving or gamma-irradiation.

Fitting Size	Cat. No.
1/4" HB x 1" TC	75838-678
1/4" HB x Mini TC	75838-676
3/8" HB x 1" TC	75838-668
3/8" HB x Mini TC	75838-680
1/2" HB x 1" TC	75838-672
1/2" HB x Mini TC	75838-670
3/4" HB x 1" TC	75838-674



**AVANTOR STERILENZ®-II/EC PRE-GASKETED END CAPS**

Avantor SterilEnz®-II/EC Pre-Gasketed Sanitary End Caps are designed with a medical grade silicone gasket mechanically attached to the fitting face and a handle for easy installation and removal. SterilEnz end caps are the perfect solution for capping important process components such as sterilizing grade filters and process end connections.



Description	Includes	Cat. No.
TC End Caps with Silicone Gasket, 1"	Single Individually Double Poly Pouched	75875-266
TC End Caps with Silicone Gasket, 1"	Pk. 10, Bulk, Double Poly Pouched	75875-268
TC End Caps with Silicone Gasket, 1", Gamma Irradiated	Pk. 10, Individually Double Poly Pouched	75875-270



# Enhanced performance under pressure

solutions for production

## VWR® BRAID-REINFORCED SILICONE TUBING

This low-volatile grade, platinum-cured silicone tubing is produced in a certified ISO Class 6 (FED-STD-209E Class 1000/M4.5) cleanroom for critical pharmaceutical, biomedical, food, and cosmetic applications.

- Sterilizable by autoclave, gamma radiation, SIP, and CIP processes
- Enhanced performance under pressure without compromising flexibility
- Tubing is resistant to temperature extremes, compression set, chemical attack, ozone, radiation, moisture, and environmental exposure
- Certified free of animal-derived ingredients
- Imparts no taste or odor to critical stream
- Length: 25 feet



I.D. x O.D., in.	Wall Thickness, in.	Cat. No.
0.188 x 0.462	0.137	89068-426
0.250 x 0.500	0.125	89068-410
0.375 x 0.625	0.125	89068-428
0.500 x 0.875	0.188	89068-412
0.625 x 0.990	0.183	89068-430

# Customized tools for hard-to-reach surfaces!



## CE ABOVE THE FLOOR TOOLS™

Vileda Professional® is proud to introduce a new line of specialty above-the-floor tools! These innovative tools are ideal for areas difficult to reach, clean and disinfect. CE Softwall Cleaner™ has a unique design allowing full contact on curtain from ceiling to floor. The CE Tank Cleaner™ moves in three dimensions to ensure good contact with the surface being cleaned. Multi-Surface Tool™ is versatile and bendable to give the tool different shapes to effectively clean any surface. The MicroIntensive L Sleeves and Covers are double-sided and pre-laundered cleaning pads.

- Innovative, autoclavable tools are designed to allow full range of motion during cleaning and disinfecting
- Full coverage for uneven and non-flat surfaces such as pipes, tanks, hoods, isolators, and soft walls
- Independently demonstrated bacteria reduction of 99.99%
- All tools are easy gliding with low particle shedding



Description	Size, in.	Cat. No.
CE Softwall Cleaner	50	76318-338
CE Tank Cleaner	9	76318-340
CE Multi-Surface Cleaner	23	76318-342
MicroIntensive L Sleeve	18	76318-348
MicroIntensive L Cover	15	76318-346
Vileda Telescopic Handle, Maxi w/ color rings	108-183	76318-350

# The answer to your single-use instrument needs

## SKLARSAFE™ SAFETY SCALPELS

SklarSafe™ Safety Scalpels offer the unique "Click and Lock" safety feature with "Sure-Grip" handle. The one-hand operation ensures you never touch the blade. These scalpels provide healthcare workers protection and control without compromising performance or quality.

Sklar's disposable blades and scalpels offer ultra sharp edges honed from hard carbon or stainless steel for longevity and abrasion resistance. Available in a wide range of sizes and bulk quantities of 100 per box.



Blade Number	Cat. No.
<b>Disposable Scalpels - Sterile</b>	
10	82029-850
11	82029-852
12	82029-854
15	82029-856
20	82029-858
21	82029-860
22	82029-862
23	82029-864

Visit [vwr.com](http://vwr.com) to view the full listing and details.

Blade Number	Cat. No.
<b>SklarSafe™ Sterile Safety Scalpels</b>	
10	89025-966
11	89025-968
15	89025-970
<b>Disposable Stainless Steel Surgical Blades, OR Grade</b>	
10	82029-834
11	82029-836
12	82029-838
15	82029-840
20	82029-842
21	82029-844

Blade Number	Cat. No.
22	82029-846
23	82029-848
<b>Disposable Carbon Steel Sterile Surgical Blades, OR Grade</b>	
10	82029-818
11	82029-820
12	82029-822
15	82029-824
20	82029-826
21	82029-828
22	82029-830
23	82029-832



# Our collection of brands

At VWR, part of Avantor, our solutions are developed with you as our focus. They are crafted by our team and network of professionals with advanced degrees in science, quality control, engineering, manufacturing, and industry experience. Trust that you can put your focus and resources into the work at hand – and leave the balancing of quality and affordability to us!

For more information visit [vwr.com/solutionsforscience](http://vwr.com/solutionsforscience)



## Contamination control



### solutions for production

#### VWR® PURESTEP ADHESIVE MATS

Multi-layered contamination control mats remove and contain dirt and dust from foot traffic and equipment wheels.

- Mats consist of 30 or 60 sheets of 1.5 mil low-density polyethylene film
- Each sheet has a 0.3 mil thick acrylic-based, pressure-sensitive adhesive coating
- Antimicrobial agent protects against growth of bacteria, mold, and fungus
- Numbered tabs ensure one-at-a-time sheet removal
- Mats can easily be removed during routine floor maintenance
- Available with or without high-tack adhesives



#### 30-Layer High-Tack Mats

L x W, cm (in.)	Cat. No.
<b>White</b>	
91.4 x 45.7 (36 x 18)	89131-500
152.4 x 91.4 (60 x 36)	89089-166
<b>Blue</b>	
91.4 x 61 (36 x 24)	82031-676
114.3 x 45.7 (45 x 18)	87004-296
114.3 x 66 (45 x 26)	82028-392
114.3 x 91.4 (45 x 36)	82029-678
152.4 x 91.4 (60 x 36)	89066-232

Please visit [vwr.com](http://vwr.com) for a complete listing of sizes, colors, and styles.

# FOCUS: PRODUCTION VOLUME 1 ISSUE 2



800 932 5000 | VWR.COM

Prices, product, and/or services details are current when published and subject to change without notice. | Certain products or services may be limited by federal, state, provincial, or local regulations. | VWR, part of Avantor, makes no claims or warranties concerning sustainable/green products. Any claims concerning sustainable/green products are the sole claims of the manufacturer and not those of VWR International, LLC and/or Avantor, Inc. or affiliates. All prices are in US dollars unless otherwise noted. Offers valid in US and Canada, void where prohibited by law or company policy, while supplies last. | Trademarks are owned by Avantor, Inc. or its affiliates, unless otherwise noted. | Visit [vwr.com](http://vwr.com) to view our privacy policy, trademark owners, and additional disclaimers. © 2019 Avantor, Inc. All rights reserved.



VWR LIT LIBRARY  
c/o Archway  
20770 Westwood drive  
Strongsville, OH 44149

ATTN: POST OFFICE: ELECTRONIC  
SERVICE REQUESTED

ATTN. MAILROOM:  
If addressee is no longer with the  
organization, please deliver to  
production materials buyer. Thank you.

PRSR STD  
US POSTAGE  
PAID PERMIT 293  
MIDLAND MI

1119 20M Lit.No.930904

## Setting science in motion to create a better world



From breakthrough discovery to agile delivery, we offer an extensive portfolio of mission-critical products, services, and solutions. We are a trusted global partner to customers in the life sciences, advanced technologies, and applied materials industries.



VWR, part of Avantor provides an integrated, seamless purchasing experience optimized for your success.

Learn how the new Avantor is moving forward  
at [avantorsciences.com](http://avantorsciences.com)

©2019 Avantor®, Inc. All rights reserved.



PB19019\_NA