

Let's focus on what's important.

3M[™] Personal Protective Solutions for Healthcare Professionals

Protected today. Prepared for tomorrow.

Healthcare facilities have multiple departments and functions that can be exposed to potential health and safety hazards.

Workers in healthcare facilities may encounter a broad range of hazards, requiring a variety of PPE to help protect them so that they can provide care, support care delivery and maintain facility operations. 3M is here to provide guidance on potential hazards that may pose risks for workers and help with selection and use of different types of PPE in healthcare environments.

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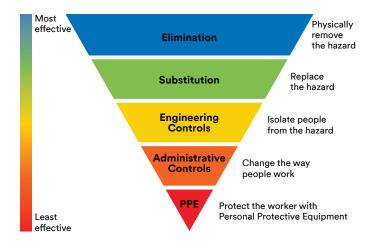
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Hierarchy of Controls⁴

Controlling exposures to hazards in the healthcare environment is essential to help protect workers. Using the hierarchy of controls can help remove hazards when possible or reduce the risk of exposure and potential for illness or injury. The hierarchy prioritizes controls that are the most effective beginning with elimination to those that are less protective. In healthcare settings, elimination and substitution of hazards is not always possible.

PPE should be used in conjunction with other controls to be most effective or used in situations when other controls are not feasible.



¹ Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html

- ² OSHA, Joint Commission, NIOSH [2011] Letter to US Hospitals highlighting work precautions for handling hazardous drugs, April 4, 2011.
- ³ USP General Chapter <800> Hazardous Drugs- Handling in Healthcare Settings, 2020. Retrieved from www.usp.org.

⁴ Centers for Disease Control and Prevention, The National Institute for Occupational Safety and Health (NIOSH). Hierarchy of Controls. https://www.cdc.gov/niosh/topics/hierarchy/default.html.

The 3M science of safety: protecting people, improving lives.

From helping to identify potential hazards to providing education and training, 3M can help solve a variety of worker health and safety challenges.

3M can help you with understanding best practices to help reduce the risk of exposure, including differences between masks and filtering facepiece respirators, the importance of fit, and respirators such as powered air purifying respirators (PAPR) that can provide a higher level of respiratory protection, and can be an alternative for staff when a tight-fitting respirator may not be appropriate.



In addition to quality PPE, we provide a wide range of resources and solutions you need each step of the way.



Health and safety knowledge:

- Deep knowledge of workplace hazards combined with an understanding of standards and regulations related to worker health and safety
- Global leader in respiratory protection.
- Various resources and tools to help establish and run a successful workplace Respiratory Protection Program.



Respirator fit knowledge and support

- ► Education on the importance of respirator fit.
- Help with respirator selection based on fit.
- Resources for qualitative and quantitative fit testing as required by OSHA.



Training and education

From digital learning modules to in-person onsite training support and a suite of technical resources regarding best practices and alignment to standards and regulations.



Standards and regulatory advancement

Team dedicated to advancing standards and regulations that are focused on helping to improve worker safety and health globally.



Anti-counterfeit authentication with the 3M[™] Verify App

- The 3M Verify Product Authentication app utilizes advanced technology to uniquely identify a bar code and determine if a product package is genuine.
- Counterfeits pose serious risks: counterfeit respirators are not tested and approved to the same standards as authentic respirators from 3M.
- ► For more information visit <u>3M.com/verify</u>.

Masks versus filtering facepiece respirators: understand the difference.

Masks and filtering facepiece respirators are very different in fit, intended use, testing and approval. Procedural and surgical masks are not designed to help reduce the wearer's exposure to airborne hazards. It is important to understand the differences because your safety is essential in order to deliver care to patients.



Filtering Facepiece Respirator: Tight-fitting, designed to form a seal around the nose and mouth.

Procedural/Surgical Mask: Loose-fitting, does not form a seal to the face, allowing unfiltered air to flow around gaps at the edge of the mask.





	Surgical N95	Standard N95	Surgical Mask
Fit	Tight, designed to form a seal around the nose and mouth	Tight, designed to form a seal around the nose and mouth	Loose, does not form a seal to the face, allowing unfiltered air to flow around gaps at mask edge
Fit testing required	\checkmark	\checkmark	
Intended for use as respiratory protection. Helps reduce particles inhaled by the wearer, with at least 95% filtration efficiency	\checkmark	\checkmark	
Helps reduce particles expelled by the wearer	\checkmark	\checkmark	\checkmark
Fluid resistant	\checkmark		\checkmark
Approvals	NIOSH Approved and FDA Cleared	NIOSH Approved	FDA Cleared

The importance of fit.

Recent events have raised important questions about respiratory protection. One thing is certain: to provide the expected protection, a tight fitting respirator needs to seal properly to the wearer's face. But what exactly does that mean and how can we tell? From help with fit testing to training and resources, 3M is here to help answer those questions.



3M is your reliable partner when it comes to helping you understand the importance of respirator fit.

When you focus on fit, you help give your employees greater confidence in their respiratory protection. If a worker's respirator doesn't seal properly, there's no certainty it's providing the expected protection.

3M has been an industry leader in respiratory protection for decades, with a longstanding focus on fit. We're here to help you when it comes to:



Education and training on respirator use

- Why is it so important to fit test? A respirator needs to fit and seal to a wearer's face. Otherwise, contaminated air can pass around the respirator and into the wearer's breathing zone.
- Proper respirator fit is critical for tight-fitting respirators to work as intended to help reduce exposure to airborne hazards.
- Facial hair can interfere with the seal of a tight-fitting respirator to the face. OSHA states that tight-fitting respirators are not permitted to be worn by employees who have facial hair that comes between the sealing surface of the facepiece and the face.¹



Choosing the appropriate respiratory protection for the job

- Within your healthcare facility, workers may be exposed to a range of airborne hazards depending on the situation. 3M offers a variety of respirators to help reduce employee exposure to different potential hazards and in different environments.
- > When selecting respirators, it's important to consider the hazard, exposure, and fit.



Fit testing expertise

- 3M can provide guidance and support for implementing fit testing within your respiratory protection program. Visit <u>3M.com/respiratorfit</u> for the latest information.
- There are multiple fit testing methods available. 3M can offer guidance regarding how to implement OSHA required fit testing within your respiratory protection program.



A variety of innovative technologies and features designed to enhance wearer comfort and fit.

The 3M[™] Aura[™] 1870+ Particulate Respirators have a three panel flat fold design that makes it suitable for a wide range of face shapes and sizes, and has a fit test pass rate of up to 93%.*

¹ Occupational Safety and Health Administration (1974). Occupational Safety and Health Standards, 1910.134, Appendix A. Fit Testing Procedures (Mandatory). https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9780

^{*}Based on quantitative fit testing in the 3M United States Fit Test Laboratory in April-May 2021 of subjects with a range of face sizes (face sizes 1 through 10 on the <u>NIOSH bivariate grid (PDF, 422.93 KB)</u>. A passing fit factor is defined as 100, based on OSHA 1910.134. 3M[™] Aura[™] 1870+ was tested, 9205+ and 9210+ pass rates are based on these test outcomes, as further described in the

Similar-Fit Model Pairings of 3M Filtering Facepiece Respirators (PDF, 113.55 KB). Individual results may vary. For more information, view this 3M Respirator Fit Study (PDF, 312.16 KB).

Direct care for patients with suspected or confirmed infectious pathogens.

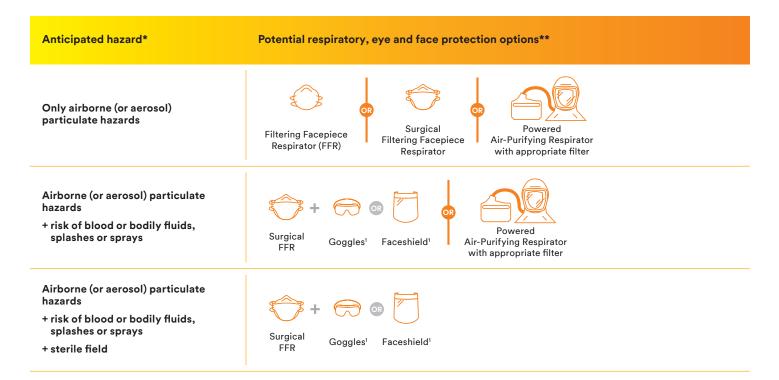
The health and safety of staff is essential in order to deliver care to patients. Healthcare workers may be exposed to a wide range of hazards when providing care to patients and while working in patient care areas. Even with other controls in place, standard and transmission based precautions are essential for helping reduce transmission risk. Some potential hazards may include bloodborne pathogens, bacteria or viruses transmitted via droplets or airborne particles, or performing aerosol generating procedures on patients with suspected or confirmed infectious disease. Healthcare workers need a wide range of PPE options to help reduce risk of exposure depending on the anticipated hazard, clinical situation or procedure.

Potential workers at risk:



- Nurses
- Doctors
- Therapists
- Nursing assistants

- Patient care techs
- Environmental services personnel
- Paramedics/first responders



*Based on facility hazard assessment, infection control risk assessment, anticipated exposure and exposure assessment

**in addition to other PPE.

¹Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.htm

Handling and administration of hazardous drugs (HD) and drug neutralization.

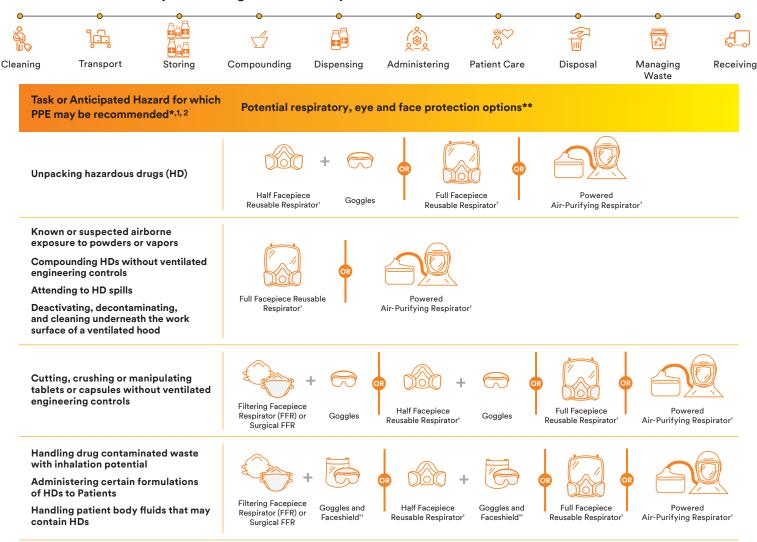
Every day in healthcare settings, workers are exposed to various drugs such as chemotherapy, antiviral treatments, hormones and other therapies. Many of these drugs can present serious hazards to the health and safety of workers who handle them. Potential routes of exposure include absorption through the skin, inhalation of dusts, aerosols of vapors, accidental injection and unintentional ingestion. In addition to other controls, staff need a variety of PPE options depending on the risk of exposure and activities performed.

Potential workers at risk:

Pharmacists

- Doctors
- Pharmacy technicians
- Nurses

Some tasks that may have a higher risk of exposure include:^{1,2}



Environmental services personnel

*Based on facility hazard assessment, relevant occupational exposure limits, exposure and exposure assessment.

**In addition to other PPE.

⁺ Used with appropriate filters/cartridges for hazard.

++ Eye and face protection must be worn when there is a risk of spills or splashes of HD's or HD waste materials when working outside of a ventilated device (USP-800)

¹NIOSH [2016]. NIOSH List of Antineoplastic and Other Hazardous Drugs in Healthcare Settings, 2016. DHHS (NIOSH) Publication No. 2016-161

² USP General Chapter <800> Hazardous Drugs- Handling in Healthcare Settings, 2020. Retrieved from www.usp.org.

Get the right protection for the job.

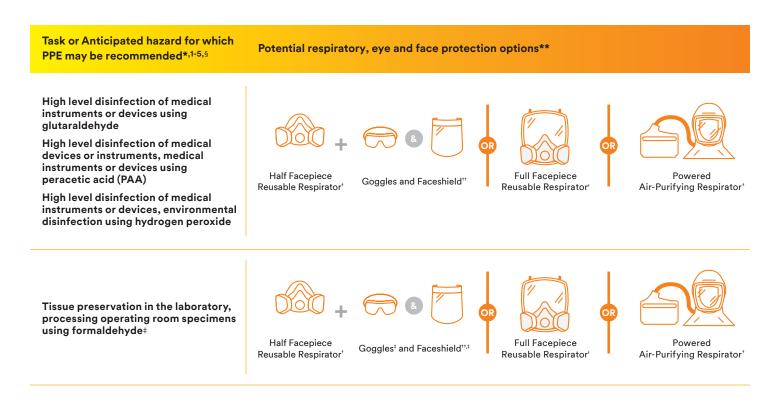
Disinfection and chemical use.

Disinfectants and other chemicals used in healthcare facilities are essential for keeping patients safe and care delivery. These chemicals can be potentially hazardous to the workers using them. Potential routes of exposure can include eye or skin absoprtion and inhalation if the chemicals become airborne as gases, vapors or particulates. Hazard and chemical exposure assessment are critical for worker health and safety to determine approaches to help reduce risk and put appropriate controls in place.

Potential workers at risk:

- Environmental services staff
- Central sterile supply staff
- Laboratory personnel
- Operating room staff





*Based on facility hazard assessment, relevant occupational exposure limits, exposure and exposure assessment.

- **In addition to other PPE.
- ⁺ Used with appropriate filters/cartridges for contaminant.
- ⁺⁺Eye and face protection may be needed based on exposure assessment
- ‡OSHA Formaldehyde standard requires gas-proof goggles

§Not a complete list of potentially hazardous chemicals

- ¹Best practices for the safe use of glutaraldehyde in health care. Occupational Safety and Health Administration. <u>https://www.osha.gov/sites/default/files/publications/glutaraldehyde.pdf</u>. Published 2006. Accessed November 3, 2022.
- ² CDC NIOSH Pocket Guide to Chemical Hazards hydrogen peroxide. Centers for Disease Control and Prevention. National Institute for Occupational Safety and Health. <u>https://www.cdc</u>. gov/niosh/npg/npgd0335.html. Published October 30, 2019. Accessed November 3, 2022.
- ³ OSHA Fact Sheet Formaldehyde. Occupational Safety and Health Administration. <u>https://www.osha.gov/sites/default/files/publications/formaldehyde-factsheet.pdf</u>. Published 2011. Accessed Novermber 3, 2022.

⁴ OSHA Federal Regulation 29 CFR 1910.1048 - Formaldehyde

⁵ 3M. WorkerPPETipsforPAA. https://multimedia.3m.com/mws/media/1679382O/worker-personal-protective-equipment-ppe-tips-for-peracetic-acid-use-in-pharmaceuticals-tb.pdf

Globally trusted N95 filtering facepiece respirators (FFRs) to help protect against particulates.

Performance, potential hazards, comfort and a proper fit are all important. 3M gives you options to choose the respirator design that best fits your specific needs.

When properly fitted, 3M[™] N95 FFRs help create a seal between the face and the respirator; filter 95% of airborne particles, including viruses and bacteria; and are scientifically designed to help make respiratory protection comfortable.

3M[™] Aura[™] Particulate Respirator and Surgical Mask 1870+



- Soft nosefoam and smooth inner materials enhance comfort
- Designed for the highest level of fluid resistance to splash and spatter of blood and other infectious materials*
- NIOSH Approved and FDA Cleared
- Three panel flat fold design that makes it suitable for a wide range of face shapes and sizes, and has a fit test pass rate of up to 93%."



*According to ASTM F1862 at 160mm Hg







	3M [™] Aura [™] Particulate Respirator and Surgical Mask 1870+	3M [™] Health Care Particulate Respirator and Surgical Mask 1860/1860S'	3M [™] VFlex [™] Health Care Particulate Respirator and Surgical Mask 1804/1804S'
Regulatory approvals/ clearance	NIOSH N95 & FDA	NIOSH N95 & FDA	NIOSH N95 & FDA
Fluid resistant	Yes	Yes	Yes
Fit pass rate	Up to 93% [™]	N/A	N/A
Style	Flat Fold (3-Panel)	Cup	Flat Fold
Headband material	Polyisoprene	Braided Polyisoprene	Polyisoprene
Packaging	20 Individually Wrapped per Carton, 12 Cartons per Case	20 Count per Carton, 6 Cartons per Case	50 Count per Carton, 8 Cartons per Case

^{†1860}S and 1804S small sized respirator

⁺⁺ Based on quantitative fit testing in the 3M United States Fit Test Laboratory in April-May 2021 of subjects with a range of face sizes (face sizes 1 through 10 on the <u>NIOSH bivariate grid (PDF, 422.93 KB)</u>. A passing fit factor is defined as 100, based on OSHA 1910.134. 3M[™] Aura™ 1870+ was tested, 9205+ and 9210+ pass rates are based on these test outcomes, as further described in the <u>Similar-Fit Model Pairings of 3M Filtering Facepiece Respirators (PDF, 113.55 KB)</u>. Individual results may vary. For more information, view this <u>3M Respirator Fit Study (PDF, 312.16 KB</u>).

Comfortable, adaptable, and dependable, 3M has your face covered.

3M provides a full line of reusable respirators to help protect staff from the various potential hazards throughout healthcare facilities.

Half or full facepiece reusable respirators can help provide respiratory protection against both particles and/or certain gases/vapors. Half facepiece respirators cover the lower half of the face, including the nose and mouth.

Full facepiece respirators also cover the eyes and much of the face, which can help provide a comprehensive single solution for respiratory, eye and face protection.

What is the difference between a filter and a cartridge?

Half facepiece reusable respirators*

6000 Series

6000 Series

Filters help protect against airborne particles, including bacteria, viruses and aerosolized powders or dusts. Cartridges help protect against certain gases and vapors and combination cartridges help protect against airborne particles as well as certain gases and vapors.



6500 Series



Full facepiece reusable respirators*





6000 Series

Filters and cartridges

	Part Number	NIOSH approved for	Part Number	NIOSH approved for	Part Number	NIOSH approved for
1002 C	2091	Particulates	6003	Organic vapor/ Acid gas	60921	Organic vapor/ Particulates
A REAL	7093	Particulates	6005	Formaldehyde/ Organic vapor	60923	Organic vapor/ Acid gas/ Particulates
	6001	Organic vapor	6006	Multi-gas/Vapor	60926	Multi-gas/ Vapor/ Particulates

*Additional models may be available. Contact your 3M Sales Representative for more details.

Enhanced comfort. Versatile protection.

It's important to keep your employees safe on the job in hazardous conditions. That means providing them with protection that is comfortable and convenient: a Powered Air Purifying Respirator (PAPR) system.

3M[™] Versaflo[™] Powered Air Purifying Respirator (PAPR) Solutions for Healthcare.

PAPRs are battery powered, reusable systems that may cover the user's face and neck depending on the headtop that is worn. The PAPR HE filter can filter 99.97% of particles. PAPRs can be used to help protect against airborne biological particles, such as bacteria and viruses and also certain gases and vapors. Certain PAPRs can be used in accordance with USP 800 protocols¹ when used with the appropriate gas and vapor cartridges.

PAPR advantages:

- > Integrated safety, with options for respiratory, head, eye and face protection.
- Designed for maximum comfort.
- Loose fitting headgear can eliminate the need for fit testing and can accommodate limited facial hair.
- > Easy to assemble, disassemble, and troubleshoot for maintenance and decontamination.
- Lightweight and comfortable for long periods.

What you can count on with 3M[™] Versaflo[™] PAPR systems:

Ease



With Versaflo PAPR systems, workers may experience added comfort wearing their PPE, which may help to improve compliance.



Easy to use and easy to maintain, Versaflo PAPR systems make for an easy choice.

Versatility Versaflo systems can offer an integrated system that you can easily customize for different work environments and worker needs.

Find the right fit for your environment

The entire series of $3M^{\sim}$ Versaflo^{\sim} blowers was developed to give you the choice you need to handle the hazards you face.





Feature	TR-300+	TR-600
HEPA filter	Yes	Yes
Gas and vapor cartridges	No	Yes
Battery run time	High capacity: 8-12 hours	Standard: 5-13 hours High capacity: 8-19 hours
Battery charge time	<3.5 hours	<4.5 hours
Adjustable airflow	Yes	Yes
Alarms	Visual/Audible	Visual/Auditory/Vibratory
Cleaning and disinfection	Wipe down	Wipe down or submerge with optional cleaning kit



¹USP General Chapter <800> Hazardous Drugs - Handling in Healthcare Settings. 2020. Retrieved from www.usp.org

You can count on 3M filters and cartridges to give you the versatility you need to help handle a wide range of hazards.

What is the difference between a filter and a cartridge?

Filters help protect against airborne particles, including bacteria, viruses and aerosolized powders or dusts. Cartridges help protect against certain gases and vapors and combination cartridges help protect against airborne particles as well as certain gases and vapors.



Choose your PAPR headtop.

Lightweight, versatile and easy to maintain, 3M[™] Versaflo[™] S-Series headtops help protect your workers from a variety of contaminants while maintaining comfort.



Staying protected is key.

Protective coveralls, protective goggles, and protective eyewear designed to help keep you safe.

In addition to other PPE, protective coveralls, protective goggles and eyewear can also be used to help reduce exposure risk and help workers stay protected. 3M has a wide range of solutions that combine performance with comfort, designed to help keep you safe on the job.

3M[™] Protective Apparel

High quality products which help protect against certain hazards.

Just like with respirators, when choosing protective coveralls, it's essential to consider the potential hazards. 3M[™] Protective Apparel can offer a wide variety of benefits depending on your needs. Our range of coveralls are designed to help keep you protected from specific hazards. As a result, the way they look, their features and even the material they're made from is different. We know that choosing the right type of coveralls can seem daunting, so we've prepared a selection flow chart to help.

3M[™] Protective Coverall 4545

Made from a soft lightweight fabric with taped seams, providing a very good barrier to hazardous particles and limited liquid splash.

- 2 way zip with fully sealable storm flap
- 3-panel hood
- Knitted cuffs

- Low linting
- Anti-static
- Multiple Sizes: Medium, Large, and Extra Large



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Particle Antistatic







Limited

microorganism

See what you've been missing with 3M[™] Scotchgard[™] Protector Anti-Fog Coating.

Protective goggles help safeguard workers eyes from splash hazards. One of the main issues associated with protective goggle use is fogging. A fogged lens can be not only frustrating, but also dangerous. For example, removing protective goggles to wipe away fog can expose eyes to workplace hazards. 3M[™] GoggleGear Splash Goggle with 3M[™] Scotchgard[™] Anti-Fog Protector Coating resists fogging longer than traditional anti-fog coatings, through up to 25 washings with water^{*}, helping workers see clearly, longer. Designed for working in challenging environments, such as hot and humid conditions, indoor/outdoor work, physically demanding tasks and climate-controlled areas.



GG501SGAF - 3M[™] GoggleGear Splash Goggle 500 Series with Clear 3M[™] Scotchgard[™] Anti-Fog Lens and Replaceable Cloth Strap

*Based on 3M internal testing per EN168 test method when compared with traditional anti-fog coatings



Protective eyewear with performance, style and comfort.

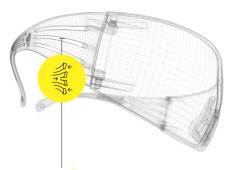
3M[™] SecureFit[™] Protective Eyewear: helping to keep you safe and comfortable on the job.

Protecting your eyes from potential hazards on the job is important. 3M[™] SecureFit[™] Protective Eyewear Series is available with 3M[™] Pressure Diffusion Temple Technology, which helps provide a secure, snug fit, without compromising comfort. This can help standardize eyewear across a diverse work force with varying head and face shapes. Better yet, the safety eyewear is lightweight, allowing your workers to wear the product all day long, comfortably.

Designed to perform.

Curved temples for enhanced security

Our design applies pressure on the less sensitive back of the head instead of the temples, achieving a comfortable fit even during rapid head movement.



3M[™] Pressure Diffusion Temple Technology

3M's innovative temple design features slotted ribs that provide comfortable pressure equalization, allowing the temples to flex and self-adjust to the size of the wearer's head.



SF301AF - 3M[™] SecureFit[™] Protective Eyewear 300 Series with Clear Anti-Fog Lens

- U6-rated polycarbonate lenses absorb 99.9% of UVA, UVB and UVC rays between 200 nm and 380 nm
- Meets the requirements of ANSI Z87.1 Standard
- Lightweight design, weighing less than 1 oz
- Soft temple tips and one-piece nose bridge

🔏 🛦 WARNING

These respirators help to protect against certain airborne contaminants. Before use, the wearer must read and understand the User Instructions provided as part of the product packaging. A written respiratory protection program must be implemented meeting all the requirements of OSHA 1910.134 including training, fit testing and medical evaluation. Requirements must be met and/or requirements of applicable jurisdiction, as appropriate. Improper use may result in sickness or death. For correct use, see supervisor and User Instructions, contact 3M Personal Safety team in the Philippines by email to 3mphsafety@mmm.com.

Respiratory:

Respirators help protect against certain airborne contaminants. Before use, the wearer must read and understand the User Instructions provided as a part of the product packaging. Follow all local regulations. In the U.S., a written respiratory protection program must be implemented meeting all the requirements of OSHA 29 CFR 1910.134 including training, fit testing and medical evaluation. Requirements must be met and/or requirements of the applicable jurisdiction, as appropriate. Misuse may result in sickness or death. For correct use, consult supervisor and User Instructions, or contact 3M Personal Safety team in the Philippines by email to 3mphsafety@mmm.com.

Eye Protection:

These eye and face protection products help provide limited eye and face protection. Misuse or failure to follow warnings and instructions may result in serious potential injury, including blindness or death. For correct use, selection, and applications against flying particles, optical radiation and / or splash, consult supervisor, read User Instructions and warnings on the package, or contact 3M Personal Safety team in the Philippines by email to 3mphsafety@mmm.com.

Coveralls:

Important Notice: This guide is only an outline. It should not be used as the only means for selecting protective apparel. Before using any protective apparel, the wearer must read and understand the user instructions for each product. Specific country legislation must be observed. If in doubt, contact a safety professional. Selections of the most appropriate PPE will depend on the particular situation and should only be made by a competent person knowledgeable of the actual working conditions and the limitations of PPE. Final determination as to the suitability of these products for a particular situation is the employer's responsibility. This information is subject to revision at any time. Always read and follow all User Instructions supplied with your 3MTM Protective Coveralls in order to ensure correct operation. If you have questions contact 3M Technical Service.

Warranty:

3M will replace or refund the purchase price of any Personal Safety Division (PSD) product found to be defective in material, manufacture, or not in conformance with any express warranty. This warranty is exclusive and is in lieu of any implied warranty of merchantability or fitness for a particular purpose. LIMITATION OF LIABILITY: Except as provided above, 3M shall not be liable or responsible for any loss or damage, whether direct, indirect, incidental, special or consequential arising out of the sale, use or misuse of 3M PSD products, or the user's inability to use such products. THESE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE.



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