# ADVANTAGE ® 200 LS AND 3200 RESPIRATORS



Optimal respiratory protection equipment is essential for workers in a variety of work environments, including chemical, general industrial, pharmaceutical, construction, nuclear, craft trades, and even Do-It-Yourselfers.

MSA's Advantage<sup>®</sup> Respirators and wide selection of cartridges provide the protection you need, whether they are used for precautionary measures or in situations where health-endangering vapors or particulates are present. Workers worldwide have come to depend on MSA's line of Advantage Respirators, and they equate the Advantage name with innovation, durability, comfort, and safety.

Incorporating MSA's global engineering expertise, Advantage Respirators meet NIOSH and EN standards, while maintaining flexibility and affordability. For your convenience, Advantage cartridges and filters are interchangeable with all Advantage respirators, both half-mask and full facepiece, simplifying the selection process and eliminating the need to fit-test individuals on many different masks. They are easy to maintain, so your inventory – and your costs – are minimized.



#### Advantage 200 LS Respirator

When developing the Advantage 200 LS, MSA set a new standard for respiratory protection. It is the first half-mask designed exclusively for people who wear respirators.

The 200 LS Respirator, with its filter technology, meets every requirement of modern respiratory protection. It weighs less than competitive respirators to make it more stable on your face. It feels softer to keep you comfortable, and it adds new style to safety.

The Advantage 200 LS has become the most popular half-mask respirator in the MSA line.

The Advantage 200 LS Respirator provides a betterlooking, lighter, and softer facepiece, which is made from a translucent "Ocean Blue" formulation of thermoplastic rubber. The unmatched fit exceeds all previous levels of comfort. And, because the 200 LS facepiece features the same great facial seal as previous models of Advantage half-masks, users of other Advantage half-mask models do not need to be fit-tested again before they wear the Advantage 200 LS Respirator. The Advantage 200 LS Respirator also features MSA's patented MultiFlex® System – a soft, pliable combination of rubber and plastic that provides a virtually customized fit. In addition, the highly effective AnthroCurve<sup>™</sup> Sealing Surface instantly conforms to each wearer, equalizing pressure on the face seal area and eliminating annoying pressure points.

#### It Fits You In Every Way

Despite its groundbreaking design, the Advantage 200LS Respirator fits your budget as well as it fits your face.

The facepiece has only four components:

- Facepiece blank
- 4-point voke
- Inhalation/exhalation valves
- Head harness (choice of single or 2-piece neck strap)

The swept-back cartridge and filter design provides for more stability, better weight distribution, and easy visibility.





#### **Advantage 3200 Respirator**

As the newest generation of full-face respirators, the Advantage 3200 Respirator sets new standards for comfort and versatility. No matter where your job site is located, you'll be able to see and feel the benefits of the Advantage 3200 Respirator. The Advantage 3200 full-face mask is the perfect complement to the Advantage 200 LS.

Its fit technology is based on the industry-proven face seal of the MSA Ultra Elite® Facepiece, which is based on facial measurement data from more than 8,000 people.

The Advantage 3200 Respirator enhances worker performance because a new design allows even lower breathing resistance and includes a nose cup that reduces fogging in low temperatures or high-humidity conditions.

In addition, the facepiece lens has been engineered to be optically correct, giving you superior visibility and peripheral vision. The wraparound scratch-resistant polycarbonate face piece lens provides a wide distortion-free field of vision. The lens meets all requirements of ANSI Z87.1 including the high-impact performance requirements. It exceeds requirements for haze, prism, and power, while eliminating distortion.

Donning the mask is made easier with MSA's new preadjustable straps. With the Advantage 3200 Respirator, you can position the upper straps for a consistent fit and minimal adjustment, time after time. The pre-set upper straps prevent uncomfortable snags during donning and doffing, and also provide a tighter, more secure seal. Wearers also have the option of the new European-style Advantage harness, which dons like a catcher's mask.



The 200 LS integrates well with other PPE

#### Simplicity

MSA's exclusive Advantage 200 LS and Advantage 3200 Respirators are some of the easiest to use on the market. They solve all comfort problems, and their maintenance is easy to learn. All components can be replaced without special tools in a matter of seconds, and the Advantage 200 LS and 3200 filters and cartridges are interchangeable.



# **MSA Ordering and NIOSH Approval Information**

# Advantage Despirator

The Advantage line of particulate, chemical, and combination cartridges is NIOSH-approved (to 42 CFR, Part 84) and provides lightweight, low-profile performance.

Acid Gases

Advantage Respirator				Actu dases												
Cartridges		Color	organi	c Vap	or me Sulfu	Diox	ide Di	oxide ogen C Hydr	nlorid	ania.	nilami Form	ne	ide ngen fi	uoride unv Va Filt	por er Type & Er fiicie	ney***
MSA Cartridge	Re-Order	color	Organ	chlori Chlori	Sulfu	Chlo	Hydr	Hydr	Amm	Met	Form	Hydr	Merr	Filt	er Ettra	See
Description	Part Number	OV	CL	SD	CD	HC	HS*	AM	MA	FM	HF	MV	P100		N95	To Right
GMA	815355	020														2,3
GMA with N95 Prefilter	815355 with 815394 or 816357	(Ê)													<b>1</b>	2,3
GMA with R95 Prefilter	815355 with 815397	<b>02</b> 0												<b>1</b>		2,3
GMA P100	815362	<u></u>											020			2,3,4
GMB	815356		0 <b>2</b> 0	(Ê)	<b>1</b>	020	( <b>2</b> )									2
GMB with N95 Prefilter	815356 with 815394 or 816357		020	<b>(2</b> )	1	020	<b>12</b> 0									2
GMB with R95 Prefilter	815356 with 815397		020	<b>(2</b> )	120	020	<b>12</b> 0									2
GMB P100	815363		020	<b>1</b>	1	020	1									2,4
GMC	815357	020	<b>12</b> 0	<b>1</b>	020	020	020									2,3
GMC with N95 Prefilter	815357 with 815394 or 816357	<b>1</b>	<b>12</b> 0	<b>(2</b> )	<b>12</b> 0	020	<b>12</b> 0								(Ê)	2,3
GMC with R95 Prefilter	815357 with 815397	020	120	<b>1</b>	020	020	0 <b>2</b> 0							0Ê0		2,3
GMC P100	815364	<b>1</b>	(Ê)	<b>02</b> 0	(Ê)	020	020						0Ê0			2,3,4
GMD	815358							<b>1</b>	<b>(2</b> )							2,3
GMD with N95 Prefilter	815358 with 815394 or 816357							<b>020</b>	<b>(2</b> )						0 <b>2</b> 0	2,3
GMD with R95 Prefilter	815358 with 815397								020					<b>1</b>		2,3
GMD P100	815365							<b>02</b> 0	020				020			2,3,4
GME	815359	<b>(2</b> )	0 <b>2</b> 0	<b>1</b>	020		0Ê0	020	020	( <b>1</b> )	<b>1</b>					2,3
GME with N95 Prefilter	815359 with 815394 or 816357	<b>1</b>	020	<b>1</b>	020	<b>(2</b> )	020	020	020	<b>1</b>	0 <b>2</b> 0				<b>1</b>	2,3
GME with R95 Prefilter	815359 with 815397	020	120	020	020	020	020	020	020	020	1			<b>02</b> 0		2,3
GME P100	815366	<b>1</b>	0 <b>2</b> 0	<b>1</b>	( <b>2</b> )	<b>02</b> 0	020	<b>1</b>	020	020	020		020			2,3,4
GMI P100	815641	<b>1</b>											020			2,4
Mersorb	815361		020									020				2,4
Mersorb with N95 Prefilter	815361 with 815394 or 816357		0 <b>2</b> 0									1				2,4
Mersorb with R95 Prefilter	815361 with 815397		020									<b>1</b>				2,4
Mersorb P100	815368		0 <b>2</b> 0									020	020			2,4
Low-Profile P100	815369												020			1,4
N95 Snap-On Filter and Cover	815394 Pack of 10															_
	815357 Pack of 50				_				Δ	L L	\/A_	DN		$\mathbf{c}$		
	815392 Reusable Snap-On Cover. 2 in a Package.				An ann	vronriat	cartrid	lao char							lified profes	sional unles
R95 Snap-On Filter and Cover	815397 Pack of 20				the car	tridge/o	anister	utilizes	an end-	of-servi	ce-life i	ndicato	r. The cl	hange-o	ut schedule ific work pra	must take ir
	815401 Reusable Snap-On Cover.													• •	inces having	

\*\* Effective against, but not NIOSH-approved for Iodine Vapor. \*Escape only.

2 in a Package.

#### \*\*\* Definitions

N95-Particulate Filter (95% filter efficiency level) effective against particulate aerosols *free of oil*; time use restrictions may apply.

R95-Particulate Filter (95% filter efficiency level) effective against all particulate aerosols; time use restrictions may apply.

P100-Particulate Filter (99.97% filter efficiency level) effective against all particulate aerosols.

other conditions unique to the worker's environment. If using against substances having poor warning properties, there is no secondary means of knowing when to replace the cartridges/canister. In such cases, take appropriate additional precautions to prevent overexposure, which may include a more conservative change-out schedule or using an air-supplied respirator or SCBA. Failure to follow this warning can result in serious personal injury or death. As a reference, below is a partial list of substances having poor warning properties:

Acrolein	Hydrogen cyanide
Aniline	Hydrogen selenide
Arsine	Methanol
Bromine	Methyl bromide
Carbon monoxide	Methyl chloride
Diisocyanates	Methylene chloride
Dimethyl sulfate	Nickel carbonyl

Nitric acid Nitro compounds Nitrogen oxides Nitroglycerin Nitromethane e chloride Phosgene Phosphine



Phosphorus trichloride Stibine Sulfur chloride Urethane or other diisocvanatecontaining paints Vinyl chloride

# MSA Ordering and NIOSH Approval Information

# Flexi-Filter<sup>®</sup> Pads for Advantage Respirators

	Re-Order	\ \	olorC	Filter	TVP Effic	/
MSA Description	Part N0.		P100	P95	N95	Notes Below
Flexi-Filter P100	818342		<b>1</b>			1,4
Flexi-Filter P100 with Nuisance Level OV, Ozone Removal	818343		020			1,4
Flexi-Filter P100 with Nuisance Level AG, HF Removal	818344		<b>3</b>			1,4
Flexi-Filter N95	818346				<b>(2</b> )	1
Flexi-Filter N95 with Nuisance Level OV Removal	818347				<b>(2</b> )	1
Flexi-Filter P95	818354			020		1
Flexi-Filter P95 with Nuisance Level OV Removal	818355			020		1
Flexi-Filter, P95/HF (NIOSH)	10063227			<b>12</b> 0		1

#### Notes

- 1. Do not use in atmospheres containing less than 19.5 percent oxygen, in atmospheres containing gases or vapors or in atmospheres immediately dangerous to life and health.
- 2. Do not use in atmospheres containing less than 19.5 percent oxygen, or in atmospheres immediately dangerous to life and health.
- 3. Do not wear for protection against organic vapors with poor warning properties or those which generate high heats of reaction with the sorbent material in the cartridge.
- 4. 99.97 percent efficient against 0.3 micron DOP.

# An the fibrisez (Pris dr.2)

These low-profile, flexible pads fit well under a welding hood and with other personal protective equipment. They offer great balance and weight distribution for maintaining a good face seal, while their swept-back design provides improved vision and comfort.

#### **Advantage 3200 Ordering Information**

		Part
Description	Size	Number
Advantage 3200 Twin Port Respirator, Rubber Head Harness	Small	10028996
Advantage 3200 Twin Port Respirator, Rubber Head Harness	Medium	10028995
Advantage 3200 Twin Port Respirator, Rubber Head Harness	Large	10028997
Advantage 3200 Twin Port Respirator, Advantage Head Harness	Small	10031340
Advantage 3200 Twin Port Respirator, Advantage Head Harness	Medium	10031309
Advantage 3200 Twin Port Respirator, Advantage Head Harness	Large	10031341

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#### **Advantage 200 LS Facepieces**

Description	2-Piece Neckstrap	Single Neckstrap
Advantage 200 LS, small	815696	815448
Advantage 200 LS, medium	815692	815444
Advantage 200 LS, large	815700	815452



# **Support Resources**

## Advantage Technical Support CD

For correct use of any respirator, the user must be instructed properly in its use and maintenance. MSA's Advantage Technical **TECHNICAL SUPPORT CD** Support CD contains all essential information MSA about Advantage 200 LS and 3200 Respirators, care and use information. instruction manuals, fittesting forms, parts lists, and cartridge information. The easy-to-use, interactive format is provided in English, Spanish, and French.

Call MSA's Customer Service at 1-800-MSA-2222.

#### **Response® Respirator Selector**



The Response Respirator Selector website enables users to find the recom-mended respirator for more than 700 chemical hazards. This website can help you identify the proper respirator you need, and presents the broadest range of respiratory protective devices available. MSA offers the Response

Respirator Selector on our website at www.MSAnet.com/response.

#### **Cartridge Life Expectancy Calculator**



MSA's interactive Cartridge Life Expectancy Calculator will help you determine the life expectancy of specific respirator cartridges in various hazardous situations including how long a cartridge should be used before it must be replaced. This information can be found at www.MSAnet.com/msa northamerica/msaunitedstates/cartlife.

To meet OSHA's respiratory protection fit-testing requirements, MSA offers facepiece-testing kits and accessories. As you may know, qualitative fit-test methods are subjective in nature and rely on the judgment of the test subject, and quantitative testing methods rely on objective data to determine a proper fit.

# **Qualitative Fit-Test Accessories**

#### **Bitrex Qualitative Fit-Test Kit Ordering Information**

Bitrex QLFT Kit	697444
Replacement Fit-Test Solution	697446
Sensitivity Solution	697445
Replacement Hood	697448
"Using the Qualitative Fit-Test Kit" videotape	697449



Oualitative Test Kit



Replacement Hood and Test Solutions

#### Saccharin Qualitative Fit-Test Kit

The Saccharin Qualitative Fit-Test Kit eliminates the need for special filters and is especially useful for dust/mist respirators.

#### **Ordering Information**

Saccharin QLFT Kit	697287
Replacement Sensitivity Test Solution, 55 ml bottle	697285
Replacement Fit-Test Solution, 55 ml bottle	697286
Replacement Hood	697448
"Using the Qualitative Fit-Test Kit" videotape	697325

#### **Banana Oil Qualitative Fit-Test Kit**

MSA's Banana Oil Fit-Test Kit relies on a test subject's ability to detect a 95% pure solution of Isoamyl Acetate (banana oil).



#### **Ordering Information**

Qualitative Fit Test Kit	801628
Qualitative Fit Test Kit, in rugged Pelican case	801629



# **Quantitative Fit-Test Accessory**

### Advantage Fit Test Adapter

The Advantage Fit Test Adapter allows quantitative fit testing of the Advantage 200LS and Advantage 3200 respirators when equipped with a P-100 high-efficiency filter.



**Ordering Information** Advantage Fit Test Adapter

10056424

# **Air-Purifying Respirator Accessories**

Spectacle Kits for Full-Facepiece Respirators

For use by workers who must wear corrective lenses.

#### **Ordering Information**

Spectacle Kit for Advantage 3200



10029298

#### **Cover Lens for Advantage 3200**

This clear, flexible cover lens protects the facepiece lens from scratches during storage, handling, and use.

#### **Ordering Information**

Advantage 3200 Cover Lens, box/25



813832

# **Carrying Pouch**

Belt-mounted carrying pouch with Velcro closures. Carrying Pouch for half-mask respirators 468730 Carrying Pouch for Advantage 3200 Respirator, black 817040





#### MSA Confidence Plus<sup>™</sup> Germicidal Cleaner

Mix with warm water for a germicidal cleaner that is effective against various micro-organisms including immuno-deficiency virus Type 1 (HIV-1) (associated with AIDS). EPA-approved for use on safety equipment.



#### **Ordering Information**

MSA Confidence Plus Germicidal Cleaner, in 32 oz. bottle

10009971

#### **Personal Safety Equipment Towelettes**

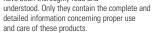
Provides an excellent method for wiping and refreshing respirators, hardhats, and other safety equipment between full cleaning periods.



#### **Ordering Information**

Canister with 220 towelettes, 4½" x 6"	697382
Box of 100 individually wrapped towelettes,	
<u>7½" x 5"</u>	697383
"The Big Ones," Box of 50 individually	
wrapped towelettes, 8" x 11"	1002287

Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and



**ID 1012-10-MC / Apr 2006** © MSA 2006 Printed in U.S.A. 
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