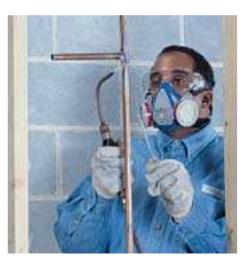


The Advantage[®] 200 *LS* Respirator The Advantage[®] 3000 Respirator

[High Performance Gear For Today's Industrial Athlete]

High Performance Gear for Today's Indus



When pro athletes get ready for the big game, everything – including their equipment – has to be in top condition. *Why should it be any different for you, the industrial athlete?* Every day, you face hazards and work in situations as intense as a World Cup final.

MSA knows that whatever your "playing field," you need a respirator that helps you function like a pro. You've come to equate the Advantage Respirator name with innovation, durability and comfort. Now, we're introducing two complementary respirators that exceed all expectations – the Advantage™ 200 LS Respirator and Advantage™ 3000 Respirator.

Total Solutions

Together, the new Advantage Respirators provide a total solution for your air-purifying respiratory protection needs. Incorporating MSA's global engineering expertise, Advantage Respirators are designed to meet NIOSH and EN standards, allowing flexibility and affordability on a global scale. For the utmost in convenience, Advantage cartridges and filters are interchangeable between the two models, simplifying the selection process and eliminating the need to fit-test individuals on many different masks. (For detailed information on cartridges and applications, please see pages 4-5). Lastly, both respirators are easy to maintain, so your inventory - and your costs - are minimized.

Advantage 3000 Respirator

As the newest generation of full-face respirators, the Advantage 3000 Respirator defines comfort and versatility.

No matter where your job site is located, you'll be able to see and

feel the benefits of the Advantage 3000 Respirator.

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

The Advantage 3000 Respirator enhances worker performance through a new design that allows even lower breathing resistance and includes a nose cup that reduces fogging.



trial Athlete

In addition, the facepiece lens has been engineered to be optically correct, giving you superior visibility and peripheral vision. In short, the new lens, which exceeds



the performance requirements of ANSI Z87.1, eliminates distortion.

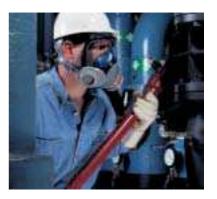
Donning the mask is made easier with MSA's new pre-adjustable straps. With the Advantage 3000 Respirator, you'll have the ability to set the position of the upper straps to receive a consistent fit, time after time. In addition, the preset upper straps prevent uncomfortable snags during donning and doffing, and also provide a tighter, more secure seal. Wearers also can choose the new European-style Advantage harness, which dons like a catcher's mask.

Maximum Versatility

Added to the exceptional comfort of the Advantage 3000 Respirator is its unique versatility. The facepiece has been engineered to allow single-, dual- and triple-port configurations. This design allows the user to easily adapt the same facepiece for negative-pressure air-purifying, constant-flow air-line or PAPR applications, as well as combinations of these applications.



SIngle-port configuration with chin-style gas mask canister.



Twin-port configuration with combination cartridges.



Triple-port Duo-Twin Configuration.

MSA Ordering and NIOSH Approval Information

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

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Advantage Respirator Cartridges

Cartridges			/	ding	lar	or	:01	ide Di	oxide	chlori	Sulfide	2	ine	Nde I	iluorio	por ve	ncy***
MSA Cartridge	Re-Order	~	olor	oding	chlor	ine Sulfu	r Die Chlo	ine Di ine Di Hydr HS*	Hydr	Amn	alentide Sulfide Net	nyla: Form	Hyd	Nde Ner	ury Filt	por er Type & er Type fricie	See
Description	Part Number		ov	CL	SD	CD	HC	HS*	AM	MA	FM	HF	MV	P100	R95	N95	To Right
GMA	815355		(2)														2,3
GMA with N95 Prefilter	815355 with 815394 or 816357		020													0 2 0	2,3
GMA with R95 Prefilter	815355 with 815397		020												(2)		2,3
GMA P100	815362		(2)											(Ê)			2,3,4
GMB	815356			1	(2)	(2)	1	1									2
GMB with N95 Prefilter	815356 with 815394 or 816357			12 0	020	12 0	(2)	12 0									2
GMB with R95 Prefilter	815356 with 815397			020	020	1	(2)	020									2
GMB P100	815363			020	(2)	02 0	(2)	020									2,4
GMC	815357		020	020	020	020	(2)	12									2,3
GMC with N95 Prefilter	815357 with 815394 or 816357		۲	(Ê)		120		(2)								020	2,3
GMC with R95 Prefilter	815357 with 815397		۲	1	1	0 2 0		1									2,3
GMC P100	815364		ک	0 2 0	020	0Ê0	(2)	1						020			2,3,4
GMD	815358								1	020							2,3
GMD with N95 Prefilter	815358 with 815394 or 816357								1	12 0						0 2 0	2,3
GMD with R95 Prefilter	815358 with 815397								020	120					(2)		2,3
GMD P100	815365								020	020				020			2,3,4
GME	815359		(2)	1	12 0	020	(2)	0 2 0	(2)	020	(Ê)	0 2 0					2,3
GME with N95 Prefilter	815359 with 815394 or 816357		12 0	0 2 0	020	020	(2)	0 2 0	1	12 0	(Ê)	1				1	2,3
GME with R95 Prefilter	815359 with 815397		۲	1	020	(2)	(2)	1	(2)	020	(2)	1			(2)		2,3
GME P100	815366		۲	1	020	(2)		1	(2)	020		020		(2)			2,3,4
GMI P100	815641		(2)											020			2,4
Mersorb	815361			1									020				2,4
Mersorb with N95 Prefilter	815361 with 815394 or 816357			1									(2)				2,4
Mersorb with R95 Prefilter	815361 with 815397			020									(Ê)				2,4
Mersorb P100	815368			1									12 0	020			2,4
Low-Profile P100	815369													(2)			1,4
N95 Snap-On Filter and Cover	815394 Pack of 10																
	815357 Pack of 50											1/	DN				
	815392 Reusable Snap-On Cover. 2 in a Package.					An app	ropriat	e cartri	dge cha							qualified pro	ofessional.
R95 Snap-On Filter and Cover	815397 Pack of 20 815401 Reusable Snap-On Cover.					unless must t	the car ake into	tridge/o p accou	canistei nt all fa	r utilizes actors th	s an eno nat may	d-of-ser / influe	vice-lif nce res	e indica piratory	tor. The protect	change-out ion includir t. If using ag	schedule ng specific

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

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.

An appropriate cartridge change-out schedule must be developed by a qualified professional, unless the cartridge/canister utilizes an end-of-service-life indicator. The change-out schedule must take into account all factors that may influence respiratory protection including specific work practices and 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 Phosgene Phosphine

Phosphorus trichloride
Stibine
Sulfur chloride
Urethane or other
diisocyanate-
containing paints
Vinyl chloride

MSA Ordering and NIOSH Approval Information

Flexi-Filter[®] Pads For Advantage Respirators

			/.	odii	TYPE	Jent's
MSA Filter Description	Re-Order Part No.	(0101 P100		N95	See Notes Below
Flexi-Filter P100	818342		١			1,4
Flexi-Filter P100 with Nuisance Level OV, Ozone Removal	818343		(2)			1,4
Flexi-Filter P100 with Nuisance Level AG, HF Removal	818344		(2)			1,4
Flexi-Filter P100 with Nuisance Level HG, CL Removal	818345		١			1,4
Flexi-Filter N95	818346					1
Flexi-Filter N95 with Nuisance Level OV Removal	818347					1
Flexi-Filter N95 with Nuisance Level AG, HF Removal	818348					1
Flexi-Filter N95 with Nuisance Level HG, CL Removal	818349					1
Flexi-Filter P95	818354			(Ê)		1
Flexi-Filter P95 with Nuisance Level OV Removal	818355			020		1
Flexi-Filter P95 with Nuisance Level AG, HF Removal	818356			0 2 0		1
Flexi-Filter P95 with Nuisance Level HG, CL Removal	818357			12 0		1

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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.

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.

Advantage 200 LS Ordering Information

Description	Size	Part Number
Advantage 200 LS Respirator	Small	815696
Advantage 200 LS Respirator	Medium	815692
Advantage 200 LS Respirator	Large	816700

Advantage 3000 Ordering Information

Description	Size	Part Number
Advantage 3210 Twin Port Respirator, Rubber Head Harness	Small	10028996
Advantage 3220 Twin Port Respirator, Rubber Head Harness	Medium	10028995
Advantage 3230 Twin Port Respirator, Rubber Head Harness	Large	10028997
Advantage 3211 Twin Port Respirator, Advantage Head Harness	Small	10031340
Advantage 3221 Twin Port Respirator, Advantage Head Harness	Medium	10031309
Advantage 3231 Twin Port Respirator, Advantage Head Harness	Large	10031341

Other variations of Advantage 3000 available Fall 2001

Advantage 200 LS Respirator

In 2000, MSA set a new standard with the Advantage 200 LS Respirator, the first half-mask designed exclusively for people who wear respirators.

- It weighs less to make it more stable on your face.
- It feels softer to keep you comfortable.
- It adds new style to safety.

By using a translucent formulation of thermoplastic rubber, the Advantage 200 LS Respirator provides a better-looking, lighter and softer facepiece that exceeds all previous levels of comfort. And, because the new facepiece features the same great face seal design as other masks in the Advantage family, wearers of the Advantage 200 Respirator do not need to be fit-



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[™] 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 200 LS Respirator fits your budget as well as it fits your face.

The facepiece has only four components:

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

This cost-effective respirator is easy to maintain, so your inventory – and costs – are minimized.

tested again before they use the Advantage 200 LS Respirator.



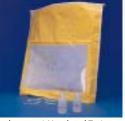


Designed to equalize the pressure around the face-seal area, the revolutionary AnthroCurve Sealing Surface ensures optimum comfort for any facial form.

Facepiece Fit-Test Accessories

Bitrex Qualitative Fit-Test Kit





Oualitative Test Kit

Replacement Hood and Test Solutions

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

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

S	accharin QLFT Kit	697287
R	eplacement Sensitivity Test Solution, 55 ml bottle	697285
R	eplacement Fit-Test Solution, 55 ml bottle	697286
R	eplacement 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

The Occupational Safety and Health Administration (OSHA) requires fit tests to ensure proper fit for workers who use respirators. Quantitative testing methods rely on objective data to determine a proper fit. Qualitative fit-test methods are subjective in nature and rely on the judgment of the test subject.



QuikChek™ II Adapter

The QuikChek II Fit-Test Adapter allows quantitative fit testing of the Advantage 200 LS and Advantage 3000 Twin-port model Respirators when equipped with a special cartridge receptacle adapter.

Ordering Information

QuikChek II Fit-Test Adapter	812022
Replacement Kit with 25 feet of sampling tubing and	
25 connectors, clips and suction cups	803196
Cartridge Adapter for Advantage Series Respirators	809999



QuikChek™ III Adapter

The QuikChek III Adapter is specially designed for respirators equipped with the Advantage 3000 Facepieces.

Ordering Information

QuikChek III Fit Test Adapter	805078
Replacement Kit with 25 ft of sampling tubing,	
25 connectors, clip and suction cups	803196
OptiFilter XL Cartridge (box of 6)	496081

Source One®

Besides great-fitting and softer respirators, here's another reason to choose MSA. Our Source One users' group helps MSA's air-purifying respirator customers to stay on top of key respiratory protection issues and MSA product developments. Membership (which is free) will provide you with the group's bi-annual newsletter, The Source; regional seminars; and regular updates about regulatory issues that impact your respiratory protection program.



Air-Purifying Respirator Accessories

MSA Confidence Plus[™] Germicidal Cleaner



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

Ordering Information

MSA Confidence Plus Germicidal	10009971
Cleaner, in 32 oz. bottle	

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, 41/2" x 6"	697382	
Box of 100 individually wrapped towelettes, 71/2" x 5"	697383	
"The Big Ones," Box of 50 individually wrapped towelettes, 8" x 11"	10022871	

Response® Respirator Selector

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Contraction of the local division of the loc	A STREET STREET	100

Available on the World Wide Web at www.MSAnet.com/response

- Helps identify the proper respirator you need
- · Has broadest range of respiratory protective devices available
- Recommends respirators for more than 700 chemical hazards
- Has nearly 3,000 chemical synonyms
- · Lists up to 27 categories of respirators, with MUCs
- Is generic in nature

Advantage Technical Support CD

- Single source for Care & Use Information, Instruction Manuals, Fit-Testing Forms, Parts Lists and Cartridge Information
- Enhances your use of MSA's Lighter, Softer half-mask and new optically correct, comfortable full-face respirators
- Convenient, immediate, paperless retrieval
- Easy-to-use, interactive format in English, Spanish and French

Spectacle Kits for Full-Facepiece Respirators

For use by workers who must wear corrective lenses.

Ordering Information

Spectacle Kit for Advantage 3000 10029298

Cover Lens for Advantage 3000

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

Ordering Information

Cover Lens Clear, package of 25	
Cover Lens Smoke, package of 25	

Cartridge Life Expectancy Calculator



Available on the World Wide Web at www.MSAnet.com/safetyproducts/cartlife

MSA's interactive web pages help users determine the life expectancy of specific respirator cartridges in various hazardous situations. This information provides guidance for how long a cartridge should be used before it must be replaced.

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 understood. Only they contain the complete and detailed information concerning proper use and care of

these products.

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