

# Respiratory Protection

Air-Purifying Respirators
Powered Air-Purifying Respirators
Air-Line Respirators
Self-Contained Breathing Apparatus









#### Advantage® 420 Half-Mask Respirator



10102182

**ADVANTAGE 420** 

- UniBond over-mold facepiece, AnthroCurve™ face seal, and low-profile design ensures excellent comfort and fit
- Easily switches between lock-down and drop-down mode
- Built-in moisture release chin cup hole, and extra-wide head and neck straps
- Designed for easy integration with other personal protective equipment such as safety glasses and welding shields
- Latex-free
- Applications include: asbestos abatement, painting, welding, sanding & grinding

Advantage 420 Assembly (includes facepiece, head cradle, elastic straps, buckle set,

For more information, please see MSA bulletin 1012-57-MC.

yoke with lever, two (2) inhalation valves, one (1) exhalation valve)

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Easy 3-Step Donnii	ng Process			
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10102184

#### Advantage 900 Half-Mask Respirator



- Innovative and secure respiratory solution for essential workers, first responders, and healthcare workers.
- With the elimination of an exhalation valve, the Advantage 900 Respirator achieves source control by filtering exhaled breath to help reduce the likelihood of contaminating the surrounding area.
- Cost-effective and eco-friendly alternative to disposable filtering facepiece respirators.
- Enables user protection up to P100 level.
- Mechanical speaking diaphragm helps to improve communication between the wearer and others.

For more information, please see MSA bulletin 1012-66-MC.

	Small	Medium	Large	
ADVANTAGE 900 FACEPIECES	10218527	10218528	10218529	Advantage 900 Respirator

NOTE: Advantage 900 is approved for use with Advantage style particulate filter cartridges only. It is not approved for use with flexi, chemical or combination cartridges.





#### **Advantage 200 LS Half-Mask Respirator**



- Lightweight, cost-efficient
- Thermoplastic rubber increases softness and decreases weight
- Patented MultiFlex® System equalizes pressure on the face-seal area, ensuring the respirator doesnot collapse during wear
- AnthroCurve face seal conforms to each user's face
- Applications include: asbestos abatement, painting, welding, sanding & grinding

For more information, please see MSA bulletin 1012-42-MC.

	Small	Medium	Large	
ADVANTAGE 200 LS	815696	815692	815700	Advantage 200 LS Respirator, with <b>2-piece</b> neckstrap
FACEPIECES	815448	815444	815452	Advantage 200 LS Respirator, with <b>single</b> neckstrap

#### **Advantage 290 Half-Mask Respirator**



- First NIOSH-approved half-mask respirator without exhalation valve to achieve source control and minimize risk of introducing infectious agents via exhaled breath.
- Cost-effective and eco-friendly alternative over filtering facepiece respirators such as N95.
- The Advantage 290 is approved for use with Advantage style particulate filter cartridges only. It is not approved for use with flexi, chemical or combination cartridges.

For more information, please see MSA bulletin 1012-60-MC.

	Small	Medium	Large	
ADVANTAGE 290 FACEPIECES	10217165	10217166	10217167	Advantage 200 LS Respirator, with <b>2-piece</b> neckstrap

#### **Comfo® Classic Half-Mask Respirator**



- SoftFeel® rubber and silicone facepieces enhance softness, increasing wearer comfort
- Face seal design provides secure, comfortable fit
- Color-coded sizing system makes sorting and identification easy

For more information, please see MSA bulletin 1012-02-MC.

	Small	Medium	Large	
COMFO CLASSIC	808075	808074	808076	Comfo Classic Facepiece, SoftFeel hycar
FACEPIECES	808072	808071	808073	Comfo Classic Facepiece, SoftFeel silicone

See page 8 for Advantage filters and cartridges and page 9 for flexible pad-style filters.

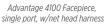
See page 9 for threaded Comfo cartridges and filters.

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#### **Advantage 4000 Series Full-Facepiece Respirators**







Advantage 4200 Facepiece w/polyester net head harness & GMA/OV cartridges



Welder's Adapter for Advantage 4200 Respirator

- Both twin-port and single-port facepieces are compatible with several MSA respirator models, including air-purifying respirators, supplied-air respirators, and powered air-purifying respirators
- Standard nosecup reduces lens fogging
- Components lock into place in seconds for quick, convenient performance

For more information, please see MSA bulletin 1012-42-MC.

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	Small	Medium	Large	
ADVANTAGE 4200	10083785	10083781	10083789	Advantage 4200 Facepiece, with <b>polyester net</b> head harness, hycar
FACEPIECES	10083787	10083783	10083791	Advantage 4200 Facepiece, with <b>rubber</b> head harness, hycar
Twin-Port Hycar	10108570	10108568	10108572	Advantage 4200 Facepiece, with <b>Kevlar net</b> head harness, hycar
ADVANTAGE 4200	10083784	10083760	10083788	Advantage 4200 Facepiece, with <b>polyester net</b> head harness, silicone
FACEPIECES	10083786	10083782	10083790	Advantage 4200 Facepiece, with <b>rubber</b> head harness, silicone
Twin-Port Silicone	10108569	10108567	10108571	Advantage 4200 Facepiece, with <b>Kevlar net</b> head harness, silicone
ADVANTAGE 4100	10083797	10083793	10083801	Advantage 4100 Facepiece, with <b>polyester net</b> head harness, hycar
FACEPIECES*	10083799	10083795	10083803	Advantage 4100 Facepiece, with <b>rubber</b> head harness, hycar
Single-Port Hycar	10108576	10108574	10108578	Advantage 4100 Facepiece, with <b>Kevlar net</b> head harness, hycar
ADVANTAGE 4100	10083796	10083792	10083800	Advantage 4100 Facepiece, with <b>polyester net</b> head harness, silicone
FACEPIECES*	10083798	10083794	10083802	Advantage 4100 Facepiece, with <b>rubber</b> head harness, silicone
Single-Port Silicone	10108575	10108573	10108577	Advantage 4100 Facepiece, with <b>Kevlar net</b> head harness, silicone

<sup>\*</sup>Adapter not included. See below chart for adapter part number.

FACEPIECE ADAPTER	10065328	Adapter assembly, twin-cartridges
ASSEMBLIES for Advantage 4000	10065329	Adapter assembly, push-to-connect
Facepieces	10065330	Adapter assembly, Rd 40
WELDER'S ACCESSORIES	10077063	Clip-On Welder's Adapter for 4200 Twin-Port Facepiece; with cover lens, less filter plate







polyester net head harness



Kevlar net head harnes



See page 8 for Advantage filters and cartridges and page 9 for flexible pad-style filters.



### **Advantage 3000 Series Full-Facepiece Respirators**







Advantage 3200 Facepiece with European-style harness



Advantage 3100 Facepiece with rubber harness

- Full-face respirator features innovative design to lower breathing resistance
- Integrated nosecup reduces lens fogging
- Silicone facepiece increases wearer comfort
- Scratch-resistant, optically correct wraparound lens provides wide field-of-vision
- Optional European-style Advantage head harness dons like a catchers mask
- Applications include: asbestos abatement, welding, sanding & grinding

For more information, please see MSA bulletin 1012-42-MC.

	Small	Medium	Large	
ADVANTAGE 3200 FACEPIECES	10028996	10028995	10028997	Advantage 3200 Facepiece, with <b>rubber</b> head harness
Twin-Port	10031340	10031309	10031341	Advantage 3200 Facepiece, with <b>European-style</b> harness
ADVANTAGE 3100 FACEPIECES	10028999	10028998	10029000	Advantage 3100 Facepiece, with <b>rubber</b> head harness
Single-Port	10031343	10031342	10031344	Advantage 3100 Facepiece, with <b>European-style</b> harness

### **Ultra-Twin® Full-Facepiece Respirator**



Ultra-Twin Respirator (small) with GMC threaded metal Comfo Cartridges

- Ideal for defense against toxic chemicals
- Wide lens is scratch resistant
- Speaking diaphragm provides clear communications
- Nosecup reduces lens fogging

	Small	Medium	Large	
ULTRA-TWIN			471310	Ultra-Twin Facepiece, hycar
FACEPIECES	480263	480259	480267	Ultra-Twin Facepiece, silicone

# Ultra Elite® Twin-Cartridge Full-Facepiece Respirator



- Widely used mask provides excellent comfort and protection
- Distortion-free lens allows wide field-of-view
- Models include Hycar rubber and silicone versions
- Unique airflow prevents lens fogging
- Speaking diaphragm provides excellent close-range communication

	Small	Medium	Large	
ULTRA ELITE FACEPIECES	10016755	10016756	10016757	Ultra Elite Facepiece, SoftFeel silicone, with twin-cartridge adapter
	493064	493020	493108	Ultra Elite Facepiece, SoftFeel hycar, less twin-cartridge adapter
	493072	493928	493116	Ultra Elite Facepiece, SoftFeel silicone, less twin-cartridge adapter

Note: Ultra Elite Facepieces must be fitted with a twin-cartridge adapter P/N 803622 to be used as a twin-cartridge respirator.





See page 10 for accessories, and pages 11–12 for fit test kit:



Advantage Respirator Cartridges					Acid Gases												
The Advantage line of particulate, chemical and combination cartridges is NIOSH-certified to 42 CFR, Part 84 and provides lightweight, low-profile performance. Cartridges fit 200 LS and 420 Half-Mask, 1000, 3000 and 4000 Series Full-Facepie Advantage Respirators.				Chlorine	Sulfur Dioxide	Chlorine Dioxide	Hydrogen Chloride	Hydrogen Sulfide	Ammonia	Methylamine	Formaldehyde	Hydrogen Fluoride	Mercury Vapor	<b>Effi</b> See	er Typo ciency nitions		
MSA Cartridge Description	Re-Order Part Number	Color Coding	٥٧	CL	SD	CD	НС	HS	AM	MA	FM	HF	MV	P100	R95	N95	See <b>Notes</b> below
Organic Vapor (GMA)	815355		<b>⊕</b>														2,3
Organic Vapor w/N95 Prefilter (GMA)	815355 w/815394 or 816357		€ <b>©</b> 9													0 <b>2</b> 0	2,3,5
Organic Vapor w/R95 Prefilter (GMA)	815355 w/815397		0€9												6 <b>€</b> 9		2,3,5
Organic Vapor/P100 (GMA)	815362		6 <b>€</b> 9											6 <b>€</b> 9			2,3,4
Acid Gas (GMB)	815356		€ <b>©</b> 9														2
Acid Gas w/N95 Prefilter (GMB)	815356 w/815394 or 816357			0 <b>2</b> 9	<b>⊕</b> 9	<b>⊕</b> 9	<b>∂©</b> 3	0 <b>0</b> 0								0 <b>2</b> 9	2,5
Acid Gas w/R95 Prefilter (GMB)	815356 w/815397			e <b>®</b> 9	<b>⊕</b>	0 <b>2</b> 9	<b>∂</b>	6 <b>9</b> 9							6 <b>€</b> 9		2,5
Acid Gas/P100 (GMB)	815363			6 <b>€</b> 9	<b>∂©</b> ∂	0 <b>2</b> 0	6 <b>€</b> 9	0 <b>2</b> 0						<b>⊕</b>			2,4
Organic Vapor/Acid Gas (GMC)	815357		6 <b>€</b> 9	6 <b>€</b> 9	<b>6©</b> ∂	<b>⊕</b>	6 <b>€</b> 9	6 <b>9</b> 9									2,3
Organic Vapor/Acid Gas w/N95 Prefilter (GMC)	815357 w/815394 or 816357		<b>6©</b> 9	e <b>®</b> 9	0 <b>0</b> 0	<b>⊕</b>	<b>⊕</b>	0 <b>0</b> 0								6 <b>2</b> 9	2,3,5
Organic Vapor/Acid Gas w/R95 Prefilter (GMC)	815357 w/815397		e <b>©</b> e	e <b>®</b> 9	000	6 <b>2</b> 9	e <b>©</b> e	6 <b>9</b> 9							e <b>©</b> 9		2,3,5
Organic Vapor/Acid Gas/P100 (GMC)	815364		0 <b>€</b> 9	<b>⊕</b> 9	<b>⊕</b> 9	<b>⊕</b> 9	<b>∂©</b> 9	0 <b>0</b> 0						0 <b>2</b> 9			2,3,4
Ammonia/Methylamine (GMD)	815358								e <b>@</b> e	e <b>®</b> e							2,3
Ammonia/Methylamine w/N95 Prefilter (GMD)	815358 w/815394 or 816357	-							000	( <u>@</u> )						<b>⊕</b>	2,3,5
Ammonia/Methylamine w/R95 Prefilter (GMD)	815358 w/815397								000	( <b>1</b>					e <b>©</b> 9		2,3,5
Ammonia/Methylamine/P100 (GMD)	815365								000	0 <b>0</b> 0				0 <b>0</b> 0			2,3,4
Multigas (GME)	815359		0 <b>©</b> 0	0 <b>2</b> 0	<b>⊕</b> ⊕	0 <b>©</b> 0	0 <b>2</b> 0	( <b>1</b>	000	( <u>@</u> )	<b>⊕</b>	6 <b>9</b> 9					2,3
Multigas w/N95 Prefilter (GME)	815359 w/815394 or 816357		0 <b>逾</b> 9	( <u>@</u> )	000	( <u>@</u> )	€ <b>©</b> 9	( <u>@</u> )	000	( <b>1</b>	<b>⊕</b>	( <u>@</u> )				6 <b>2</b> 9	2,3,5
Multigas w/R95 Prefilter (GME)	815359 w/815397		0 <b>№</b> 9	(100)	000	000	( <u>@</u> )	( <u>@</u> )	000	( <u>@</u> )	0 <b>№</b> 9	( <u>@</u> )			( <u>@</u> )		2,3,5
Multigas/P100 (GME)	815366		e <b>©</b> e	000	000	000	( <u>@</u> )	( <u>@</u> )	( <u>@</u> )	( <u>@</u> )	e <b>©</b> e	000		G <b>@</b> 9			2,3,4
lodine Vapor/P100 (GMI)*	815641		( <b>1</b>	1										( <u>@</u> )			2,4
Chlorine/Mecury Vapor (Mersorb)	815361		4.5.	( <u>@</u> )									6 <b>2</b> 9	4.5.			2
Chlorine/Mecury Vapor w/N95 Prefilter (Mersorb)	815361 w/815394 or 816357			( <u>@</u> )									000			0 <b>0</b> 0	2,5
Chlorine/Mercury Vapor w/R95 Prefilter (Mersorb)	815361 w/815397			<b>6©</b> 9									e <b>©</b> 9		0 <b>€</b> 9		2,5
Chlorine/Mercury Vapor/P100 (Mersorb)	815368			<b>6©</b> 9									000	( <b>1</b>			2,4
Low-Profile P100	815369 Pack of 2 10123079 Pack of 100													( <b>1</b>			1,4
P100 with Splash Guard	10146939 Pack of 2													<b>⊕</b>			1,4
N95 Snap-On Prefilter and Cover	815394 Pack of 10 816357 Box of 50							A	WA	RNI	NG						
R95 Snap-On Prefilter and Cover	815392 Reusable Snap-On Cover, 2 in a pkg 815397 Box of 20 815401 Reusable Snap-On Cover, 2 in a pkg	utilizes a respirato If using a the cartr include a warning	utilizes an end-of-service-life indicator. respiratory protection including specific If using against substances having poor the cartridges/canister. In such cases, ta include a more conservative change-oul warning can result in serious personal in				hange-out schedule must be developed by a qualified professional, unless the cartridge/ life indicator. The change-out schedule must take into account all factors that may influer uding specific work practices and other conditions unique to the worker's environment. s having poor warning properties, there is no secondary means of knowing when to repla such cases, take appropriate additional precautions to prevent overexposure, which may ye change-out schedule or using an air-supplied respirator or SCBA. Failure to follow this us personal injury or death. As a reference, below is a partial list of substances having por							influenc ent. replace h may w this	e		
N95-Particulate Filter (95% filter efficiency level) effective a	against particulate aerosols	warning properties:  Acrolein Hydrogen cyanide Nitric acid Phosphorus trichloride						le									
free of oil; time use restrictions may apply.		Aniline			Hyd	rogen se			Nitro	compou			Stibir	ne			
R95-Particulate Filter (95% filter efficiency level) effective a	gainst all particulate aerosols;	Arsine			Metl	hanol			Nit	rogen o	xides		Sulfu	r chlorid	е		

time use restrictions may apply.

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

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

Methyl bromide Bromine Methyl chloride Carbon monoxide Diisocyanates Methylene chloride Dimethyl sulfate Nickel carbonyl

Nitroglycerin Nitromethane Phosgene Phosphine

Urethane or other diisocyanatecontaining paints Vinyl chloride

- 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.
- 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
- 99.97 percent efficient against 0.3 micron DOP.
- 5. Both a prefilter and cover must be used with the cartridge in order to obtain R95 or N95 particulate protection.



Comfo Respirator Cartridges						cid Gas	ses											
The Comfo line of particulate, chemical and cort o 42 CFR, Part 84. Cartridges fit Comfo Classic and Duo-Twin Respirators, and certain half-mawith Adapter (P/N 809999).	rtridge	Organic Vapor	Chlorine	Sulfur Dioxide	Chlorine Dioxide	Hydrogen Chloride	Hydrogen Sulfide	Ammonia	Methylamine	Formaldehyde	Hydrogen Fluoride	Mercury Vapor	Effic See Defin	er Type ciency nitions revious				
MSA Cartridge Description	Re-Order Part Number	Color Coding	ov	CL	SD	CD	НС	HS	AM	MA	FM	HF	MV	P100	R95	N95	See Notes on p. 8	
Organic Vapor (GMA)	464031 (10 in box)															€£	2,3,5	
Organic Vapor/P100 (GMA)	815178 (6 in box)																2,3,4	
Organic Vapor/P100 Short Stack (GMA)	815186 (6 in box)			<b>(1)</b>		<b>6</b> €€		<b>6</b> €€									2,3,4	
Acid Gas (GMB)	464032 (10 in box)					<b>€</b>		<b>6</b> €€								€£	2,5	
Acid Gas/P100 (GMB)	815179 (6 in box)			<b>©</b> E	1	<b>6</b> ₩E	1	<b>6</b> €€									2,4	
Organic Vapor/Acid Gas (GMC)	464046 (10 in box)		100	<b>©</b> E	1	<b>6</b> €€		<b>6</b> €€									2,3,5	
Organic Vapor/Acid Gas/P100 (GMC)	815180 (6 in box)			<b>©</b> E		<b>6</b> €€		<b>1</b>									2,3,4	
Organic Vapor/Acid Gas/P100 Short Stack (GMC)	815188 (6 in box)			<b>1</b>		<b>6</b> €€		<b>1</b>									2,3,4	
Ammonia/Methylamine (GMD)	464033 (10 in box)								<b>1</b>	G <b>≜</b> E				<b>1</b>			2,3,5	
Ammonia/Methylamine/P100 (GMD)	815181 (6 in box)									<b>©</b> E							2,3,4	
Multigas (GME)	492790 (10 in box)			<b>(1)</b>		<b>6</b> €€		<b>1</b>		<b>©</b> E							2,3,5	
Multigas/P100 (GME)	815182 (6 in box)			<b>©</b> E		<b>6</b> €€		<b>1</b>		<b>©</b> E		<b>(1)</b>					2,3,4	
lodine Vapor/P100 (GMI)*	815184 (6 in box)													<b>1</b>			2,4	
Chlorine/Mercury Vapor/P100 (Mersorb)	815185 (6 in box)	<b>WW</b>		<b>©</b> E									1	<b>1</b>			2,4	
Low-Profile P100	815177 (10 in box)																1,4	
Sparkfoe® P100	815176 (10 in box)													<b>1</b> €€			1,4	
Sparkfoe Low-Profile P100	10153412 (16 in box)																1,4	
Prefilter and Cover N95	816662 N95 (10 in pkg.) 816661 N95 (50 in pkg.) 489353 Reusable snap-on cover (1 in pkg.; 2 req.)															<b>6</b> ♠€	1	
Prefilter and Cover R95	816287 R95 (20 in box) 489219 R95 Reusable snap-on cover (1 in pkg.; 2 req.)														<b>(</b>		1	
* Effective against, but not NIOSH-approved for lodine Va	por. Note: See WARNING on previo	ous page.																

Flexi-Filter® Pads for Advantage Respirators						
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.  Filter Type & Efficiency  See <b>Definitions</b> on previous page						
MSA Filter Description	Part No.	Color Coding	P100	P95	N95	Notes
Flexi-Filter/P100	818342		9			1,4
Flexi-Filter/P100 w/Nuisance Level OV, Ozone Removal	818343		8			1,4
Flexi-Filter/P100 w/Nuisance Level AG, HF Removal	818344		9			1,4
Flexi-Filter/N95	818346				9	1
Flexi-Filter/N95 w/Nuisance Level OV Removal	818347				8	1
Flexi-Filter/P95	818354			9		1
Flexi-Filter/P95 w/Nuisance Level OV Removal	818355			9		1





## **Facepiece Accessories**

ADVANTAGE 420		10097887	Storage poly bag
ACCESSORIES		468730	Carrying pouch with belt loops for half-mask respirators
		809999	Advantage Adapter for threaded cartridges, package of 2
		10056424	Advantage Quantitative Fit Test Adapter
		10097899	Instruction Manual, CD Format
ADVANTAGE 200 LS		809999	Advantage Adapter for threaded cartridges, package of 2
ACCESSORIES		10056424	Advantage Quantitative Fit Test Adapter
		468730	Carrying pouch for half-mask respirators
COMFO CLASSIC		812022	QuikChek II Fit-Test Adapter for Comfo Respirators
ACCESSORIES	A STATE OF THE STA	803196	QuikChek II Replacement Kit with 25 ft of sampling tubing and 25 connectors, clips, and suction cups
			Carrying pouch with belt loops for half-mask respirators
ADVANTAGE 3000		10029298	Spectacle Kit for Advantage Respirators
SERIES ACCESSORIES		10056424	Advantage Quantitative Fit Test Adapter
		10031542	Cover Lens, clear, box of 25
		10031543	Cover Lens, smoke-tinted, box of 25
		D2056734	Black plastic carrying/storage case
ADVANTAGE 4000		10029298	Spectacle Kit for Advantage Respirators
SERIES ACCESSORIES		10056424	Advantage Quantitative Fit Test Adapter, for Advantage 4200 Facepieces
		805078	QuikChek III Fit Test Adapter for Advantage 4100 Facepieces*
			Cover Lens, clear, box of 25
			Cover Lens, smoke-tinted, box of 25
		10077063	Clip-On Welders Adapter for Advantage 4200 Twin-Port Facepiece, with cover lens, less filter plate
		10065326	Clip-On Welders Adapter for Advantage 4100 Single-Port Facepiece, with cover lens, less filter plate
		D2056734	Black plastic carrying/storage case

<sup>\*</sup>Also requires RD40 Adapter P/N 10065330

ULTRA-TWIN/		454819	Spectacle Kit for Ultra-Twin/Ultravue			
ULTRAVUE® ACCESSORIES		812022	QuikChek II Fit-Test Adapter for Ultra-Twin Respirator			
Accessonies		803196	QuikChek II Replacement Kit with 25 ft of sampling tubing and 25 connectors, clips, and suction cups			
		803622	Twin-Cartridge Adapter for Ultravue Facepieces			
		456975	Cover Lens, clear, box of 25			
		480326	Cover Lens, smoke-tinted, box of 25			
		813138	Nosecup, black, small			
	5	813139	Nosecup, black, medium			
		813140	Nosecup, black, large			
		D2056734	Black plastic carrying/storage case			
ULTRA ELITE		804638	Spectacle Kit for Ultra Elite Respirator, side wire support			
ACCESSORIES	No. I	No. J	S.J	No. I	493581	Spectacle Kit for Ultra Elite Respirator, center support
					805078	QuikChek III Fit-Test Adapter for Ultra Elite Respirators
		817446	QuikChek IV Adapter for Ultravue/Ultra Elite facepieces w/1/4-turn quick-disconnect, w/Type H cartridge			
	(1)	803622	Twin-Cartridge Adapter for Ultra Elite Facepieces			
			Cover Lens, clear, box of 25			
		805456	Cover Lens, smoke-tinted, box of 25			
		D2056734	Black plastic carrying/storage case			



#### **Cleaning Supplies**





#### **MSA Respirator Fit Test Compliance**

29 CFR Part 1910.134









### Online Response® Respirator Selector

Available at www.MSAsafety.com/responseguide

- Helps identify the proper respirator you need
- · Has broadest range of respiratory protective devices available
- Recommends respirators for more than 700 chemical hazards

### Cartridge Life Expectancy Calculator

Available at <a href="https://www.MSAsafety.com/responseguide">www.MSAsafety.com/responseguide</a>

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.



### **Fit Test Compliance Reference Guide**

Respirator Description	Class	APF	OSHA Acceptable Fit Test Methods	Required Fit Factor Quantitative	MSA Fit Test Adapter Required	Cartridge Type	Probed Facepiece P/N (if applicable)	Controlled Negative Pressure (OHD) Quan Fit Test Adapter
Advantage 200 LS	Half-Mask Negative Pressure	10	Qualitative or Quantitative	100	Advantage Adapter #10056424	Bayonet or threaded with adapter #809999	S (816515), M (816513), L (816517)	OHD P/N 9513-0210
Advantage 420	Half-Mask Negative Pressure	10	Qualitative or Quantitative	100	Advantage Adapter #10056424	Bayonet or threaded w/adapter #809999	S (10107710), M (10107731), L (10107732)	OHD P/N 9513-0210
Advantage 420	Half-Mask Negative Pressure	10	Qualitative or Quantitative	100	Advantage Adapter #10056424	Bayonet only	N/A	OHD P/N 9513-0210
Comfo Classic	Half-Mask Negative Pressure	10	Qualitative or Quantitative	100	Quik Chek® II Adapter #812022	Threaded	S (808255), M (808249), L (808261)	OHD P/N 9513-0109
Advantage 3100	Full-Face Negative Pressure	50	Qualitative or Quantitative*	500	Quik Chek III Adapter #805078	N/A	N/A	OHD P/N 9513-0210
Advantage 3200	Full-Face Negative Pressure	50	Qualitative or Quantitative*	500	Advantage Adapter #10056424	Bayonet or threaded w/adapter #809999	N/A	OHD P/N 9513-0210
Advantage 4100	Full-Face Negative Pressure	50	Qualitative or Quantitative*	500	Quik Chek III Adapter #805078 Use with RD 40 Adapter #10065330	N/A	N/A	OHD P/N 9513-0130
Advantage 4200	Full-Face Negative Pressure	50	Qualitative or Quantitative*	500	Advantage Adapter #10056424	Bayonet or threaded w/ adapter #809999	N/A	OHD P/N 9513-0210
Advantage 1000	Full-Face Negative Pressure	50	Qualitative or Quantitative*	500	Advantage Adapter #10056424	Bayonet	N/A	OHD P/N 9513-0210
Ultra-Twin	Full-Face Negative Pressure	50	Qualitative or Quantitative*	500	Quik Chek II Adapter #812022	Threaded	S (482025), M (482024), L (482026)	OHD P/N 9513-0109
Ultravue	Full-Face Negative Pressure	50	Qualitative or Quantitative*	500	Quik Chek I Adapter #802710	N/A	S (482009), M (482008), L (482010)	OHD P/N 9513-0130
Ultra-Elite	Full-Face Negative Pressure	50	Qualitative or Quantitative*	500	Quik Chek III Adapter #805078	N/A	S (813211), M (813209), L (813213)	OHD P/N 9513-0130
G1 Pressure Demand	Full-Face Positive Pressure	10,000 SCBA 1000 Air-Line	Qualitative or Quantitative	500	Ouik Chek III Adapter #805078 Use with Single Port APR adapter #10144231-SP Advantage Adapter 10056424 Use with Twin Port APR Adapter 10199720	N/A	N/A	OHD P/N 9513-0130 OHD P/N 9513-0210
Millennium Facepiece	Full-Face Negative Pressure	50	Qualitative or Quantitative*	500 2000±	Quik Chek III Adapter #805078	Threaded	Probe Assembly (10006227)	OHD P/N 9513-0130
Ultra Elite Pressure-Demand	Full-Face Positive Pressure	10,000 SCBA 1000 Air-Line	Qualitative or Quantitative	500 <sup>†</sup>	APR Fit Test Adapter Kit, #10044576 APR Fit Test Adapter Kit, Slide Version #10107229 (10032511 APR adapter only) APR Fit Test Adapter Kit, Push-to-Connect #10107256 (10040052 APR adapter only) Quik Chek Adapter Kit, Firehawk #100445761	Bayonet	Negative Pressure S (813211), M (813209), L (813213)	OHD P/N 9513-0380
Ultra Elite Respirator	Full-Face Positive/ Negative Pressure	10,000 SCBA 50 APR	Qualitative or Quantitative	500† SCBA 2000± APR	Responder Fit Test Kit #10082555	Threaded	N/A	N/A

<sup>\*</sup> If only qualitative fit test is performed on a full-face negative pressure respirator, then an APF of only 10 can be assigned. If a quantitative fit test is performed, the APF is 50.

± MSA recommends a fit factor of 2000 if the application is a CBRN environment.

† For quantitative fit testing of pressure-demand facepiece, the facepiece must be tested in a negative pressure mode which requires a minimum fit factor of 500.

‡ The Quik-Chek Adapter allows quantitative fit tests to be performed on a pressure demand Ultra Elite Firehawk facepiece by only trained and qualified personnel. Special probed facepiece is not required.



#### OptimAir® Mask-Mounted Powered Air-Purifying Respirator (PAPR) with Type HE OptiFilter® XL Filter

**OptimAir Mask-Mounted PAPR Kits** consist of motor/blower, NiMH battery, dual-rate charger, one Type HE OptiFilter XL Cartridge, PVC decon belt, and choice of facepiece. Housing of polycarbonate/polyester construction and stainless steel connectors result in extreme durability. NIOSH-approved as mask-mounted PAPR. **OptimAir Mask-Mounted PAPR offers a full two-year warranty.** 

#### Feature

#### Motor/blower assembly

- Assembly threads onto facepiece inlet; does not impede vision or facepiece fit.
- Connects to battery pack with heavy duty lockable stainless steel power cable connector.
- Lightweight, compact design.
- Low maintenance, easy decontamination.

#### Compact, lightweight, NiMH battery pack

- Sealed 12.5-oz. NiMH battery pack is small enough to fit in most pockets.
- NiMH batteries do not have NiCad battery memory effect.
- Battery pack is water-resistant for easy shower decontamination.
- Operates for more than eight hours under most conditions.

#### **Approvals and Standards**

OptimAir Mask-Mounted PAPR carries NIOSH approval No. TC-21C-0823. Filters must be replaced when air flow drops below 4 cfm (115 lpm).

**NOTE:** OptimAir Mask-Mounted PAPR is not NIOSH-approved for use with gas, chemical or combination cartridges. Use only Type HE OptiFilter XL Filter.



#### OPTIMAIR MASK-MOUNTED PAPR KITS

All Kits include: motor/blower, NiMH battery, dual-rate battery charger and cable, one Type HE OptiFilter XL Cartridge, waist belt, & choice of facepiece.

ADVANTAGE 3100 PAPR	Head Harness	Small	Medium	Large
	With <b>rubber</b> head harness	10095181	10095182	10095183
ADVANTAGE 4100 PAPR	Material	Small	Medium	Large
	Black silicone with <b>rubber</b> harness	10095193	10095189	10095197
	Black Hycar rubber with <b>rubber</b> harness	10095194	10095190	10095198

Upgrade Kits include: motor/blower, NiMH battery, dual-rate battery charger and cable, one Type HE OptiFilter XL Cartridge, and waist belt. Use your present facepiece or order facepiece separately from ordering chart.

	Description			Part No.
UPGRADE KITS	OptimAir Mask-Mounted PAPR Upgrade Kit			10095166
less facepiece	OptimAir MM2K PAPR Upgrade Kit			10025945
REPLACEMENT	Facepiece	Small	Medium	Large
FACEPIECES	Black silicone w/rubber harness	10095193	10095189	10095197
Advantage 3100	Black Hycar rubber with rubber harness	10095194	10095190	10095198
REPLACEMENT	Material	Small	Medium	Large
FACEPIECES	Black silicone w/net head harness	10083796	10083792	10083800
Advantage 4100*	Black Hycar rubber w/net head harness	10083797	10083793	10083801
REPLACEMENT	Material	Small	Medium	Large
FACEPIECES	Silicone rubber head harness	493072	493028	493116
Ultra Elite	Hycar rubber head harness	493064	493020	493108

<sup>\*</sup>Also requires RD40 Adapter P/N 10065330

	MSA Purifying Element	Purifying Protection Code	Code Color	No. in Box	Part No.
OPTIFILTER	OptiFilter XL, Type HE	HE		20	10042346
CARTRIDGES	OptiFilter XL, Type HE	HE		6	496081

	Description	Part No.
PARTS AND	Battery pack assembly, packaged	10095162
ACCESSORIES	Motor/blower assembly, w/o cable, packaged	10095163
	Cable assembly, packaged	10095164
	Charger, packaged	10095165
	Flow check device	487995
	Adapter for flow check device	491046
	Replacement belt, PVC	473902
	Carrying/storage case, black plastic	D2056734
	MSA Confidence Plus Germicidal Cleaner, 32 oz. bottle	10009971

	Description	Part No.
WAIST BELTS FOR OPTIMAIR MASK- MOUNTED	Standard—clear polyvinylchloride (PVC) support belt, 52" long (for waist sizes of up to 48")	473902
PAPRS	<b>Optional</b> —polyurethane- coated nylon belt, 67" long	492827
	No-decon applications— uncoated nylon web waist belt	9961



#### **OptimAir TL Powered Air-Purifying Respirator**



- Single hip-hugging design for motor blower, cartridges
- Battery provides lightweight comfort and fit
- Low-profile motor blower offers optimal airflow through a crush-proof breathing tube
- Ergonomic battery pack allows for free movement within confined spaces
- Unit automatically adjusts flow rates for altitude changes via an internal pressure sensor
- Audible and visual alarms indicate low flow condition and low battery voltage
- Available with standard or extended-life battery
- Approved with hoods as listed or for facepiece use with Advantage 3000, Advantage 4000, Ultra Elite, or G1 Facepiece. Facepiece style breathing tube required. Single port adapters required for G1 and Advantage 4000 Facepieces



#### STANDARD OPTIMAIR TL KITS

Kits include: PAPR motor/blower battery Smart Charger breathing tube, and decon belt

Kits include: PAPR, motor/blower, battery, Smart Charger, breathing tube, and decon belt.					
	Description	Part No.			
OPTIMAIR TL KITS	OptimAir TL Kit with <b>standard</b> battery	10081114			
for facepieces	OptimAir TL Kit with long-life battery	10081115			
OPTIMAIR TL KITS	OptimAir TL Kit with <b>standard</b> battery	10081116			
for hoods	OptimAir TL Kit with long-life battery	10081117			
OPTIMAIR TL RESPONSE KITS					
Kits include: PAPR, extended life batte	Kits include: PAPR, extended life battery, charger, breathing tube, hood and 2 Type HE cartridges.				
OPTIMAIR TL	OptimAir TL Kit with low-profile white hood and Type HE cartridges	10214805			
RESPONSE KITS	OptimAir TL Kit with full single-bib hood and Type HE cartridges	10214891			

	Single Bib	Double Bib
	Tychem® QC (polyet	hylene-coated Tyvek)
HOODS, 4-PACK, THREADED CONNECTOR, WITH SUSPENSION	10083329	10083330
HOODS, 20-PACK, THREADED CONNECTOR, LESS SUSPENSION	10095739 ( <i>white</i> ) 10095748 ( <i>yellow</i> )	10095743 ( <i>white</i> ) 10095749 ( <i>yellow</i> )
HOODS, 4-PACK, STANDARD, WITH SUSPENSION	10083383	10083384
HOODS, 20-PACK, STANDARD, LESS SUSPENSION	10095740	10095744
	Tychem SL (Sara	nex-coated Tyvek)
HOODS, 4-PACK, THREADED CONNECTOR, WITH SUSPENSION	10083381	10083382
HOODS, 20-PACK, THREADED CONNECTOR, LESS SUSPENSION	10095741	10095745
HOODS, 4-PACK, STANDARD, WITH SUSPENSION	10083385	10083386
HOODS, 20-PACK, STANDARD, LESS SUSPENSION	10095742	10095746







### **OptimAir TL Powered Air-Purifying Respirator**

	Description	Part No.
	RD-40 Inlet assembly, required for all Advantage 4100 facepieces	10065330
ACCESSORIES	Hose for facepiece	10049630
	Flow check device for facepiece only	10087129

	Description	Part No.
HOOD	20-pack	10103864
SUSPENSIONS	1 each	10078469
HOOD	Hose clamp for standard hood, 6-pack	10083843
ACCESSORIES	Hood hose	10049631
	Hood hose, extended length	10082281
	Sweatband for hood suspension, 10-pack	10083618
	Cover lens for hood, 10-pack	10082441
	Flow check device for hood only	10087130
	Fastener kit, hood to V-Gard helmet	10089665

	Description	Part No.
CARTRIDGES	HE cartridge (6-pack)	10080455
	HE cartridge (54-pack)	10154877
	OV/CL/CD/HC/HS/SD/HE/HF cartridge (6-pack)	10080454
	AM/CL/CD/FM/HC/HS/MA/SD/HE/HF cartridge (6-pack)	10080456
	Spark Guard cartridge cover (single unit) (2 req.)	10068152

	Description	Part No.
BATTERIES AND CHARGERS FOR OPTIMAIR TL PAPR	Standard battery	10076108
	Standard battery charger	10076110
	Long-life battery	10076109
	Long-life battery charger	10076107

	Description	Part No.
DECON ACCESSORIES FOR OPTIMAIR TL PAPR	Decon cover, 5-pack, natural	10075799
	Decon cover, 5-pack, yellow 1008715	
	Decon belt (backpack buckle)	10078201
	Decon belt (cam lock buckle)	10074725

	Description	Part No.
OTHER ACCESSORIES	O-ring replacement, hose hood, 10-pack	10085084
FOR OPTIMAIR TL	Comfort belt	10049623
PAPR	Cartridge receptacle cover	10081414
	Shoulder strap	10059112
	Blower unit only	10088150
	Coupling nut for hood hose, 10 pack	10217723

### **Welder's Adapter for Full-Facepiece Respirators**

- Molded of polycarbonate plastic, which has high resistance to impact, heat, and welding splatter
- Clip-on adapter attaches to facepiece by molded-in clips
- Large vision area—4½" x 5¼"—provides unobstructed view of work
- Supplied with impact-resistant cover lens; desired filter plate is ordered separately

	Description	Part No.
WELDER'S ADAPTERS	Clip-On Welder's Adapter for <b>Ultravue and Ultra Twin</b> Facepieces; with cover lens, less filter plate	472859
	Clip-On Welder's Adapter for <b>Ultra Elite</b> Facepiece; with cover lens, less filter plate	806482
	Clip-On Welder's Adapter for <b>Advantage 4200 Twin-Port</b> Facepiece; with cover lens, less filter plate	10077063
	Clip-On Welder's Adapter for <b>Advantage 4100 Single-Port</b> Facepiece; with cover lens, less filter plate	10065326
ACCESSORIES	Cover Lens	696095





### **Chin-Type Gas Masks**

- Lightweight, comfortable gas masks offer protection against particulate matter, vapors, and gases
- Small round canister and comfortable facepiece provide easy downward head movement
- Canisters offer protection from:
- Phosphine/Ammonia/Chlorine-P100
- Organic Vapor-P100
- Hydrogen Fluoride/ Chlorine/P100,
- Formaldehyde/Acid Gas/Chlorine Dioxide/Hydrogen Sulfide/P100









Advantage 3100 Single-Port Facepiece

Advantage 4100 Single-Port Facepiece

Ultravue Facepiece

Ultra Elite Facepiece

	Small	Medium	Large	
ADVANTAGE 3100	10028999	10028998	10029000	Advantage 3100 Facepiece, with <b>rubber</b> head harness
SINGLE-PORT FACEPIECES	10031343	10031342	10031344	Advantage 3100 Facepiece, with <b>European-style</b> head harness
ADVANTAGE 4100 SINGLE-PORT FACEPIECES	10083796	10083792	10083800	Advantage 4100 Facepiece, black silicone, with <b>polyester net</b> head harness
	10083797	10083793	10083801	Advantage 4100 Facepiece, black hycar, with <b>polyester net</b> head harness
ULTRAVUE	480251	480247	480255	Ultravue Facepiece, black silicone
FACEPIECES	471218	457126	471230	Ultravue Facepiece, black hycar
ULTRA ELITE FACEPIECES	493072	493028	493116	Ultra Elite Facepiece, black silicone
	493064	493020	493108	Ultra Elite Facepiece, black hycar

REPLACEMENT CANISTERS	Single Canister	Color Coding	
	10059903*		Phosphine/Ammonia/Chlorine/P100 Canister (PH/AM/CL)  **Approval:** TC-14G-0274
	10067469*		Organic Vapor/P100 Canister (OV) also effective against organic iodides and iodide vapors <b>Approval:</b> TC-14G-0279
	10067491*		Hydrogen Fluoride/Chlorine/P100 Canister (HF/CL)  **Approval: TC-14G-0280
	10067470*		Formaldehyde/Acid Gas/Chlorine Dioxide/Hydrogen Sulfide/P100Canister (FM/AG/CD/HS) <b>Approval:</b> TC-14G-0282

<sup>\*</sup>Canister contains a P100 particulate filter (99.97% filter efficiency level) against all particulate amounts.

STORAGE CASES	10075204	For Phosphine/Ammonia/Chlorine/P100 Gas Mask
AND STORAGE ACCESSORIES	10075207	For Organic Vapor/P100 Gas Mask
Accessonies	10075205	For Hydrogen Fluoride/P100 Gas Mask
	10075206	For Formaldehyde/Acid Gas/Chlorine Dioxide/Escape from Hydrogen Sulfide/P100 Gas Mask
	10071231	Wall bracket
ADDITIONAL	10068195	Belt clip
PARTS FOR BELT-MOUNTING	10068129	Breathing tube
DELI-PIOUNTING	473902	PVC belt
	9961	Web support belt, uncoated
	492827	Polyurethane-coated nylon support belt
	10068152	Spark cover



#### **Riot Control and CBRN Gas Masks**

- Provides respiratory protection against military warfare, civil unrest and CBRN threats
- High-performance, custom-fit comfort in a variety of military- and riot-style masks
- Attracts, regains and neutralizes contaminants
- Flexible lens with a wider field of view for superior visibility (Millennium & Advantage 1000 Facepieces)
- Permeation-resistant construction
- Built-in speaking diaphragm



Millennium Gas Mask
(for use with CBRN or
RIot Control canisters

Gas Mask

Ultra Elite CBRN Gas Mask

	Small	Medium	Large	
MILLENNIUM CBRN/ RIOT CONTROL GAS MASK	10051286	10051287	10051288	Millennium Gas Mask, with nosecup, drinking tube, and clear polycarbonate outsert Order either Riot Control or CBRN canisters separately.
ADVANTAGE 1000 RIOT CONTROL GAS MASK	813860	813859	813861	Advantage 1000 Riot Control Mask, complete with canister, nosecup, and identification tag (NOTE: the Advantage 1000 Riot Control Mask is NOT CBRN approved and uses Riot Control canisters only.)
ULTRA ELITE	10052776	10052781	10052778	Ultra Elite CBRN Gas Mask, with rubber head harness
CBRN GAS MASK	10052780	10052779	10052777	Ultra Elite CBRN Gas Mask, with SpeeD-ON Head Harness Order CBRN canisters separately.

RIOT CONTROL CANISTERS	818264	Millennium riot control canisters, box of 6
	817590	Advantage 1000 riot control canisters, box of 6
CBRN CANISTER	10046570	CBRN canister, for Millennium and Ultra Elite Facepieces
GME CANISTER	10160594	GME P100 canister
LENS OUTSERT	10008907	Polycarbonate lens outsert, <b>clear</b> , small
For Millennium Facepiece	10008906	Polycarbonate lens outsert, <b>clear</b> , medium/large
	10008909	Polycarbonate lens outsert, <b>tinted</b> , small
	10008908	Polycarbonate lens outsert, <b>tinted</b> , medium/large
LENS OUTSERT	806463	Polycarbonate lens outsert, <b>clear</b> , small
For Advantage 1000 Facepiece	806462	Polycarbonate lens outsert, <b>clear</b> , medium/large
	806465	Polycarbonate lens outsert, <b>tinted</b> , small
	806464	Polycarbonate lens outsert, <b>tinted</b> , medium/large
ESP® II COMMUNICATION SYSTEM For Millennium and Advantage 1000 Facepieces	10026265	1-piece, self-contained, electronic speech projection device less battery
OTHER ACCESSORIES	10034184	Gas Mask Pouch, Military Style
For Millennium and Advantage 1000 Facepieces	817040	Black Nylon Bag
	816137	Advantage 1000/Millennium Spectacle Kit



#### **MSA G1 CBRN APR**

MSA's innovative G1 Facepiece can be easily adapted into a compliant CBRN Air-Purifying Respirator with the installation of an APR Adapter, CBRN Canister, and CBRN Nosecup for use in atmospheres potentially contaminated with chemical, biological, radioactive and/or nuclear (CBRN) warfare.

#### Notes:

- G1 APR Facepiece Assembly does not include the CBRN Canister or APR Adapter, must be ordered separately.
- The G1 CBRN APR is approved for the 4-point harness, 5-point harness, and rubber harness.
- The neckstrap is also approved in both cloth and rubber.
- The standard GI facepiece nosecup is not approved for CBRN applications and the CBRN nosecup is not approved for use in a traditional firefighting situation.
- If using the standard GI facepiece in a traditional firefighting situation and CBRN environment, use the CBRN nosecup for the Fit Test.



FACEPIECE ASSEMBLIES	10194379	Facepiece Assembly, G1 APR, SMALL
	10194380	Facepiece Assembly, G1 APR, MEDIUM
	10194381	Facepiece Assembly, G1 APR, LARGE
NOSECUP KITS	10189322	KIT, REPL, CBRN Nosecup, G1 Facepiece, LG
	10189323	KIT, REPL, CBRN Nosecup, G1 Facepiece, MD/SM
AIRGUIDES	10191617	AIRGUIDE CBRN, G1 Facepiece, left
	10191618	AIRGUIDE CBRN, G1 Facepiece, right
MISCELLANEOUS	10194547	Cover, G1 Filter Adapter
	10194548	Washer, RD40, green
	10194549	Button, G1 Filter Adapter
	10046570	Canister, CBRN, PKG, Threaded
	10144231-SP	Kit, Filter Adapter Assy, G1 Facepiece

### **Responder® Powered Air-Purifying Respirator**

- Respirator provides constant filtered airflow, which reduces fatigue and prevents facepiece fogging
- Long-life unit provides non-IDLH respiratory protection for up to 8 hours
- Unit is compatible with MSA Millennium and Ultra Elite facepieces
- Batteries can be "hot-swapped"
- Blower's EMI shield eliminates interference with radio ommunications
- Applications include: CBRN incidents, civil disturbances, clandestine labs



#### You must choose Responder PAPR Kit, facepiece, and cartridge for complete system.

RESPONDER PAPR KITS less facepiece and cartridge	B-60141-030	Responder CBRN PAPR Kit with 30" Breathing Tube, LiSO <sub>2</sub> Battery
	B-60141-036	Responder CBRN PAPR Kit with 36" Breathing Tube, LiSO <sub>2</sub> Battery
	B-60170-030	Responder CBRN PAPR Kit with 30" Breathing Tube, NiMH Battery
	B-60170-036	Responder CBRN PAPR Kit with 36" Breathing Tube, NiMH Battery