

Advantage[®] 420 Half-Mask Respirator



*Because every life has a **purpose...***

Advantage 400 Series Half-Mask Respirator

The innovative Advantage 400 Respirator, the latest addition to MSA's Advantage Respirator family, offers users exceptional comfort and sophisticated design. The Advantage 400 Respirator raises the bar for ease of use, as users can quickly adjust the mask according to their individual needs.

Top five reasons to purchase the Advantage Half-Mask Respirator

- 1. Patented one-piece UniBond over-mold** facepiece offers stability, comfort and superior fit. Intelligent design eliminates multiple leak paths and with only three major components, the Advantage 400 Respirator significantly reduces cost of ownership.
- 2. AnthroCurve™ II Sealing Surface** adapts perfectly to multi-ethnic head sizes and facial contours. Facepiece design is intended to fit a broad range of users in many global regions with excellent fit and superior comfort.
- 3. Patented yoke and harness design** enables quick and easy switch between lock-down and drop-down modes. Drop-down mode allows users to remove the facepiece and rest it safely against the chest while maintaining use of head protection. Lock-down harness mode allows the user to lock in personal fit; the respirator can be donned without further adjustments.
- 4. Low-profile design integrates extremely well with other personal protective equipment (PPE)** such as hardhats, eyewear, goggles, and faceshields. Unique, one-piece ComforTop headband and harness assembly eliminates pressure points when head protection is worn.
- 5. Comfort and adjustability** with form-fitting neck buckles and wide straps that eliminate discomfort around the neck, and adjustable crown strap that adapts to different head sizes.

Maintain lower cartridge inventory to support a complete respirator program!

MSA's Advantage 420 Half-Mask Respirator Threaded Cartridge Assembly gives users an even more versatile product! MSA's Advantage 420 Half-Mask Respirator is NIOSH-approved for use with both MSA Comfo® Cartridges (threaded) and Advantage Cartridges (bayonet-style).

MSA—your best choice for APR!

The Advantage 420 Respirator Threaded Cartridge Assembly includes complete facepiece and two threaded cartridge adapters, assembled. Easily remove adapters for use with bayonet or Flexi-Filter® Pads.

- Integrates easily with other PPE
- Offers choice based upon individual preferences
- Easy, fast cleaning and minimal maintenance

Only three major components make a complete respirator...

Completely
latex-free!

Choices and Flexibility

The Advantage 420 Respirator can be used with plastic Advantage Cartridges or threaded metal Comfo Cartridges.

Head Harness

Facepiece

4-point Yoke



Advantage Respirator Cartridges

Acid Gases

The Comfo Respirator line of particulate, chemical and combination cartridges is NIOSH-certified to 42 CFR, Part 84. Cartridges fit Comfo Classic, Ultra-Twin®, Ultra Elite® Twin-Cartridge, and Duo-Twin™ Respirators, and certain half-mask and full-face Advantage Respirators with adapter.

Cartridge Description and Part Numbers.

MSA Cartridge Description	Re-Order Part Number	Color Coding	Acid Gases											Filter Type & Efficiency			See Notes below		
			Organic Vapor	Chlorine	Sulfur Dioxide	Chlorine Dioxide	Hydrogen Chloride	Hydrogen Sulfide	Ammonia	Methylamine	Formaldehyde	Hydrogen Fluoride	Mercury Vapor	P100	R95	N95			
Organic Vapor (GMA)	815355																		2,3
Organic Vapor w/N95 Prefilter (GMA)	815355 w/815394 or 816357																		2,3,5
Organic Vapor w/R95 Prefilter (GMA)	815355 w/815397																		2,3,5
Organic Vapor/P100 (GMA)	815362																		2,3,4
Acid Gas (GMB)	815356																		2
Acid Gas w/N95 Prefilter (GMB)	815356 w/815394 or 816357																		2,5
Acid Gas w/R95 Prefilter (GMB)	815356 w/815397																		2,5
Acid Gas/P100 (GMB)	815363																		2,4
Organic Vapor/Acid Gas (GMC)	815357																		2,3
Organic Vapor/Acid Gas w/N95 Prefilter (GMC)	815357 w/815394 or 816357																		2,3,5
Organic Vapor/Acid Gas w/R95 Prefilter (GMC)	815357 w/815397																		2,3,5
Organic Vapor/Acid Gas/P100 (GMC)	815364																		2,3,4
Ammonia/Methylamine (GMD)	815358																		2,3
Ammonia/Methylamine w/N95 Prefilter (GMD)	815358 w/815394 or 816357																		2,3,5
Ammonia/Methylamine w/R95 Prefilter (GMD)	815358 w/815397																		2,3,5
Ammonia/Methylamine/P100 (GMD)	815365																		2,3,4
Multigas (GME)	815359																		2,3
Multigas w/ N95 Prefilter (GME)	815359 w/815394 or 816357																		2,3,5
Multigas w/R95 Prefilter (GME)	815359 w/815397																		2,3,5
Multigas/P100 (GME)	815366																		2,3,4
Iodine Vapor/P100 (GMI)*	815641																		2,4
Chlorine/Mercury Vapor (Mersorb)	815361																		2
Chlorine/Mercury Vapor w/N95 Prefilter (Mersorb)	815361 w/815394 or 816357																		2,5
Chlorine/Mercury Vapor w/ R95 Prefilter (Mersorb)	815361 w/815397																		2,5
Chlorine/Mercury Vapor/P100 (Mersorb)	815368																		2,4
Low-Profile P100	815369 Pack of 2 10123079 Pack of 100																		1,4
P100 with Splash Guard	10146939 Pack of 2																		1,4

⚠ WARNING

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:

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.

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

Acrolein	Hydrogen cyanide	Nitric acid	Phosphorus trichloride
Aniline	Hydrogen selenide	Nitro compounds	Stibine
Arsine	Methanol	Nitrogen oxides	Sulfur chloride
Bromine	Methyl bromide	Nitroglycerin	Urethane or other diisocyanate-containing paints
Carbon monoxide	Methyl chloride	Nitromethane	
Diisocyanates	Methylene chloride	Phosgene	Vinyl chloride
Dimethyl sulfate	Nickel carbonyl	Phosphine	

Notes

- 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.
- 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.
- Both a prefilter and cover must be used with the cartridge in order to obtain R95 or N95 particulate protection.

Comfo Respirator Cartridges			Acid Gases												Filter Type & Efficiency See Definitions on next page			
MSA Cartridge Description	Re-Order Part Number	Color Coding	Organic Vapor	Chlorine	Sulfur Dioxide	Chlorine Dioxide	Hydrogen Chloride	Hydrogen Sulfide	Ammonia	Methylamine	Formaldehyde	Hydrogen Fluoride	Mercury Vapor	P100	R95	N95	See Notes on page 6	
			Organic Vapor (GMA)	464031 (10 in pkg.)														
Organic Vapor/P100 (GMA)	815178 (6 in pkg.)																2,3,4	
Organic Vapor/P100 Short Stack (GMA)	815186 (6 in box)																2,3,4	
Acid Gas (GMB)	464032 (10 in box)																2,5	
Acid Gas/P100 (GMB)	815179 (6 in box)																2,4	
Organic Vapor/Acid Gas (GMC)	464046 (10 in pkg.)																2,3,5	
Organic Vapor/Acid Gas/P100 (GMC)	815180 (6 in box)																2,3,4	
Organic Vapor/Acid Gas/P100 Short Stack (GMC)	815188 (6 in box)																2,3,4	
Ammonia/Methylamine (GMD)	464033 (10 in box)																2,3,5	
Ammonia/Methylamine/P100 (GMD)	815181 (6 in box)																2,3,4	
Multigas (GME)	492790 (10 in box)																2,3,5	
Multigas/P100 (GME)	815182 (6 in box)																2,3,4	
Iodine Vapor/P100 (GMI)*	815184 (6 in box)																2,4	
Chlorine/Mercury Vapor/P100 (Mersorb)	815185 (6 in box)																2,4	
P100	815175 (10 in box)																1,4	
Sparkfoe® P100	815176 (10 in box)																1,4	
Low-Profile P100	815177 (10 in box)																1,4	
Stand-alone and cover N95 and covers required for Comfo Respirators	816662 N95 (10 in pkg.) 816661 N95 (50 in box) 489353 Reusable snap-on cover (1 in pkg.; 2 req.)																1	
Prefilter and Cover N95	816662 N95 (10 in pkg.) 816661 N95 (50 in pkg.) 489353 Reusable snap-on cover (1 in pkg.; 2 req.)																1	
Prefilter and Cover R95	816287 R95 (20 in box) 489219 R95 Reusable snap-on cover (1 in pkg.; 2 req.)																1	

* Effective against, but not NIOSH-approved for iodine vapor. Note: See **WARNING** on previous page.



Advantage Respirator Spare Parts and Accessories

Reorder P/N	Item Description	Qty
10102182 - small 10102183 - med 10102184 - large	Advantage 420 Respirator Assembly (includes facepiece, head cradle, elastic straps, buckle set, yoke with lever, two (2) inhalation valves, one (1) exhalation valve)	1
10119574 - large 10119575 - med 10119576 - small	Advantage 420 Respirator Threaded Cartridge Assembly (includes facepiece, head cradle, elastic straps, buckle set, yoke with lever, two (2) inhalation valves, one (1) exhalation valve, two (2) threaded cartridge adapters)	1
10097807	Harness assembly with buckles (includes head cradle, elastic straps, buckle set)	1
10097883	Maintenance valve set (includes one (1) exhalation valve and two (2) inhalation valves)	1
10097886	Advantage 420 Respirator Maintenance Kit (includes harness assembly with buckles, one (1) exhalation valve, and two (2) inhalation valves)	1
10097810	Yoke with lever	1
10097881	Lever	5
10097888	Inhalation valve	10
10097891	Exhalation valve	10
10097884	Buckle set	5
10097887	Storage poly bag	1
468730	Vinyl storage bag with belt loops	1
809999	Advantage Respirator Adapter, pkg of 2, for threaded cartridges	1
10009971	MSA Confidence Plus® Cleaning Solution (32 oz.)	1
697383	Cleaning Towelettes (individually wrapped), pk 100	1
697444	Bitrex Qualitative FitTest Kit	1
10056424	Advantage Respirator Quantitative Fit Test Adapter	1
10097899	Instructional CD	1

MSA—The Safety Company

Our business is safety. We've been the world's leading manufacturer of high-quality safety products since 1914. MSA products may be simple to use and maintain, but they're also highly-sophisticated devices and protective gear — the result of countless R&D hours, relentless testing and an unwavering commitment to quality that saves lives and protects thousands of men and women each and every day. Many of our most popular products integrate multiple combinations of electronics, mechanical systems and advanced materials to help ensure that users around the world remain protected in even the most hazardous of situations.

Trust & Durability

For nearly 100, years our passionate mission of safety empowers MSA “The Safety Company” to protect lives. We are committed to providing the latest in innovative, best-in-class safety solutions that feature integrated systems capability and allow our customers to return safely to their families and friends.

Every day our customers place their lives in our hands. In response, we provide them with protection they can trust, and their stories become our stories. Hand in hand, we partner with our customers to earn that trust.

MSA: Because every life has a purpose.

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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MSA – The Safety Company

1000 Cranberry Woods Drive
Cranberry Township, PA 16066 USA
Phone 724-776-8600
www.MSAsafety.com

U.S. Customer Service Center

Phone 1-800-MSA-2222
Fax 1-800-967-0398

Pacific Asia Region

MSA Singapore
MSA S.E Asia Pte Ltd
35 Marsiling Industrial Estate Road 3,
#04-01, Singapore 739257
Phone: +65 6350 4500
Fax: +65 6350 4505

MSA Australia

Phone: 1300 728 672 / +61 02 9688 0333
Fax: +61 2 9896 1835

MSA Indonesia

Phone: +62 21 6409 000
Fax: +62 21 641 2831

MSA Malaysia

Phone: +603 8724 8208/9208
Fax: +603 8724 2208

MSA New Zealand

Customer Service
Phone: 0800 441 335

MSA Philippines

Phone: +63 9209 742 191

MSA Thailand

Phone: +66 2617 8211
Fax: +66 2617 8214

For sales enquiry, contact us [here](http://www.MSAsafety.com).