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® 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 better-looking, 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™ 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 yoke
- 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 pre-adjustable 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.

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 Respirator Cartridges

<table>
<thead>
<tr>
<th>MSA Cartridge Description</th>
<th>Re-Order Part Number</th>
<th>Color Coding</th>
<th>Acid Gases</th>
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<tbody>
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<td></td>
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<td>OV CL SD CD HC HS* AM MA FM HF MV P100 R95 N95 See Notes To Right</td>
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<td>815394 Pack of 10</td>
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<td>815397 Pack of 50</td>
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<td>815392 Reusable Snap-On Cover, 2 in a Package.</td>
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<td>R95 Snap-On Filter and Cover</td>
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<td></td>
<td>815401 Reusable Snap-On Cover, 2 in a Package.</td>
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</table>

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

### 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.

### Acid Gases

- **Organic Vapor**
- **Chlorine**
- **Sulfur Dioxide**
- **Cyanogen Chloride**
- **Ammonia**
- **Methylamine**
- **Formaldehyde**
- **Hydrogen Fluoride**
- **Mercury Vapor**
- **Chlorine Dioxide**
- **Hydrogen Fluoride**
- **Mercury Chloride**
- **Hydrazine**
- **Hydrogen Chloride**
- **Hydrogen Sulfide**
- **Methylamine**
- **Formaldehyde**
- **Hydrogen Fluoride**
- **Mercury Vapor**
- **Chlorine Dioxide**

### 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:

- Acrolein
- Hydrogen cyanide
- Nitric acid
- Phosphorus trichloride
- Amine
- Hydrogen selenide
- Nitro compounds
- Stibine
- Arsenic
- Methanol
- Nitrogen oxides
- Sulfur chloride
- Bromine
- Methyl bromide
- Nitroglycerin
- Urethane or other disiocyanate-containing paints
- Carbon monoxide
- Methyl chloride
- Nitromethane
- Dimethyl sulfate
- Nickel carbonyl
- Phosgene
- Vinyl chloride

**NIOSH-Approved** to 42 CFR, Part 84.
Flexi-Filter® Pads for Advantage Respirators

<table>
<thead>
<tr>
<th>MSA Description</th>
<th>Re-Order Part No.</th>
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<th>P95</th>
<th>N95</th>
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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 3200 Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
<th>Part Number</th>
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Advantage 200 LS Facepieces

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<tr>
<th>Description</th>
<th>2-Piece Neckstrap</th>
<th>Single Neckstrap</th>
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<tbody>
<tr>
<td>Advantage 200 LS, small</td>
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<tr>
<td>Advantage 200 LS, medium</td>
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<tr>
<td>Advantage 200 LS, large</td>
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</tr>
</tbody>
</table>
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 Support CD contains all essential information about Advantage 200 LS and 3200 Respirators, care and use information, instruction manuals, fit-testing 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 recommended 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

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
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.

Ordering Information
Carrying Pouch for half-mask respirators 468730
Carrying Pouch for Advantage 3200 Respirator, black 817040
**MSA Confidence Plus™ 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

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**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”
- Box of 100 individually wrapped towelettes, 7½” x 5”
- “The Big Ones,” Box of 50 individually wrapped towelettes, 8” x 11”

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**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 then contain the complete and detailed information concerning proper use and care of these products.

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