Antimicrobial: ViralOff technology
Antimicrobial lifetime: Tested to 20 washes without performance deviation
Washable: Yes & Self-cleaning through Polygiene Odor Crunch. For best performance and sustainability, wash less and only when needed.
Color: Black
Sizes: Small, Medium & Large
Material: 80% Polyester & 20% Spandex

ViralOff Face Mask
MSRP $12.95

Antimicrobial: Silver ion
Antimicrobial lifetime: Doesn't wash away
Washable: Yes
Filters: Built in
Filters specs: High charged filter (static adsorption)
Filter lifetime: 98% filtration efficiency after 20 washes
Color: Silver Gray
Sizes: Small, Medium & Large
Material: 77% Cotton, 8% Wool & 15% Silver

Silver iON Face Mask
MSRP $39.95

Small (kids)
Style Number - 10168

Medium (women)
Style Number - 10167

Large (men)
Style Number - 10166

Small (kids)
Style Number - 10164

Medium (women)
Style Number - 10163

Large (men)
Style Number - 10162
Protect yourself against

**VIRUSES**

**BACTERIA**

** POLLUTION**

*for Everyday & Travel*

As lockdowns slowly are opening up, it’s important to stay safe, and not use disposable masks that are essential to healthcare workers.
REDUCE OCEAN PLASTIC

By choosing a reusable face mask you don’t only help the first responders and medical staff, but also helps us in our goal to reduce ocean plastic.
Centers for Disease Control and Prevention (CDC) recommends wearing cloth face coverings in public settings where other social distancing measures are difficult to maintain (e.g., grocery stores and pharmacies), especially in areas of significant community-based transmission.

CDC also advises the use of simple cloth face coverings to slow the spread of the virus and help people who may have the virus and do not know it from transmitting it to others.

The cloth face coverings recommended are not surgical masks or N-95 respirators. Those are critical supplies that must continue to be reserved for healthcare workers and other medical first responders, as recommended by current CDC guidance.
The European Centre for Disease Prevention and Control agrees that non-surgical face masks help stop the spread of coronavirus by people who are contagious but have no symptoms.

Masks are particularly useful in busy spaces, such as grocery stores, shopping centers, and on public transport, it says.

Coronavirus can be spread by micro droplets that can spray into the air when those infected talk, cough and sneeze. These can enter the body through the eyes, nose and mouth, either directly or after touching a contaminated object.
A virus can survive on a regular face masks for a week
1. **Antimicrobial**
   Pacsafe offers two types of Antimicrobial technologies – ViralOff and Silver iON

2. **Barrier**
   The mask itself offers a barrier to prevent droplets from spreading through sneezing and coughing.

3. **Filtering**
   Pacsafe’s Silver iON is constructed with 5 different filter layers; each layer serves a specific function and ensures that the mask’s performance can be retained after washing.

Think of it as sanitizing gel for your mask
Antimicrobial: ViralOff technology
Antimicrobial lifetime: Tested to 20 washes without performance deviation
Washable: Self-cleaning through Polygiene Odor Crunch. For best performance and sustainability, wash less and only when needed
Color: Black
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ViralOff Face Mask
MSRP $12.95

Small (kids)
Style Number - 10168

Medium (women)
Style Number - 10167

Large (men)
Style Number - 10166
Using a mask is smart and considerate. But what if your mask builds up viruses?

The Pacsafe Reusable facemask treated with Polygiene® ViralOff® will hold 99% fewer viruses in 2 hours*.

**Think of it as sanitizing gel for your mask.**

*ISO18184:2019 standard antiviral test
Polygiene Odor Crunch

1. Capture of odor molecules by Odor Crunch

2. Elimination of odor molecules by Odor Crunch

3. Odor Crunch continues to capture and eliminate odor molecules as long as it is present

POLYGienie ODOR CRUNCH®

Polygiene Odor Crunch® captures and breaks down unpleasant odors that we meet in our everyday life.
Advantage

99% REDUCTION OF VIRUSES
Using viraloff® Polygiene technology

COMFORTABLE BREATHING WITH 3D FIT
Stretchable fabric for snug fit

ANTI-SPLASH
With water repellant fabric

REUSABLE
Designed for long-term use to prevent disposable waste

UV PROTECTION TECHNOLOGY
Protects face and chin from over exposure to the sun

BARRIER AGAINST DROPLETS
Helps protecting against droplets from coughs and sneezes

SUSTAINABLE
Saves water and energy by requiring less washing with Polygiene Odor Crunch Technology

REMOVES UNPLEASANT ODORS
Neutralizes odor-causing bacteria using polygiene odor crunch® technology
Pacsafe ViralOff Face Mask

ViralOff Face Mask
MSRP $12.95
REUSABLE FACEMASK

SILVER ION
**Silver iON Face Mask**
MSRP $39.95

- **Antimicrobial**: Silver ion
- **Antimicrobial lifetime**: Doesn’t wash away
- **Washable**: Yes
- **Filters**: Built in
- **Filters specs**: High charged filter (static adsorption)
- **Filter lifetime**: 98% filtration after 20 times of washing
- **Color**: Silver Gray
- **Sizes**: Small, Medium & Large
- **Material**: 77% Cotton, 8% Wool & 15% Silver

**Small (kids)**
Style Number - 10164

**Medium (women)**
Style Number - 10163

**Large (men)**
Style Number - 10162
“We’ve all seen the Superman films or read the comic books where he comes up against kryptonite and is severely weakened. Well, to harmful microbes like bacteria and viruses, silver is their kryptonite. It damages them, it destroys them, it helps to defeat them.”

The discovery of novel antiviral materials is important because many infectious diseases are caused by viruses. Silver nanoparticles have demonstrated strong antiviral activity, and graphene is a potential antimicrobial material due to its large surface area, high carrier mobility, and biocompatibility.

Silver ions are already being used in the fight against coronavirus too. In Dubai, a range of techniques have been employed including steam cleaning and disinfectant fogging, while treatment with silver ions has been deployed on the streets in Italy.
Pacsafe Silver Ion mask is a **reusable and washable** mask that provides reliable respiratory protection of at least **99% filtration efficiency** against microbes and airborne particles.

It is constructed with **5 different filter layers**; each layer serves a specific function and ensures that the mask's performance can be retained after washing. These functions include directly inactivating microorganisms through **antimicrobial materials**, and **electrostatically adsorbing microorganisms and particles** to protect users. 3D contour fit to any face shape, as well as effectively filtrate airborne particles.

Adjustable elastic clips ensure a **secure fit**. Maximizing the protection of its user, the mask's top layer is made from **silver ions fabric**, which has been constructed using pure silver-plated and cotton wool yarn.

The next-to-skin layer is made of ultra-soft Modal fabric, and Graphene, which have **antimicrobial, deodorizing, and moisture absorption** functions. These materials ensure the user's comfort and protection.

Furthermore, this mask has been certified to have over 98% filtration efficiency even after 20 washes.
5-Layer Filtration

1. Advanced Silver ions layer
   Effectively disinfect and reduce microbes.

2. High Fluid Resistance layer
   Provides a protective barrier against splashing.

3. Advanced High Charged Filter
   Effectively filter out microbes and airborne particles.

4. 3D Skeleton construction layer
   Protects filter’s functionality after multiple washes without collapsing.

5. Antimicrobial lining layer

Filtering through Static
Groundbreaking innovation that allows charged particles diversion by magnetic field.

Static filters are washable and retain a 98% filtration efficiency even after 20 washes.
Sterilized and vacuum packed to ensure end consumer that the mask has not been tampered with.

Silver iON Face Mask
MSRP $39.95
# Roadmap

## Key dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 4</td>
<td>Order placement</td>
</tr>
<tr>
<td>May 5</td>
<td>Factory PO</td>
</tr>
<tr>
<td>June 1</td>
<td>Production ready Ex Asia</td>
</tr>
<tr>
<td>June 15</td>
<td>Available North America</td>
</tr>
</tbody>
</table>
PROTECT YOUR SELF
APPENDIX
Pacsafe ViralOff Face Mask Shipper

Coming Soon
## Mask Comparison Chart

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>Pacsafe Ion</th>
<th>Pacsafe Viraloff</th>
<th>Vogmask</th>
<th>Cambridge mask co</th>
<th>Airinum + filter</th>
<th>Surgical mask</th>
<th>N95 respirator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-odor</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antimicrobial treatment on fabric</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjustable ear loops</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Built in filter</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Washable</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Valve (protecting others)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reusable: More environmentally friendly.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Barrier; Block the larger particles ejected and received through talking, coughing, spitting and sneezing.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Filters; gases and reduces odor, larger PM10, pollen and other allergens and smaller PM2.5, dust, bacteria, smoke, pollution</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Filters out at least 99% of airborne particles filtering to 0.3-μm particles</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fashion friendly</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifespan</td>
<td><strong>12 months</strong></td>
<td><strong>12–24 months</strong></td>
<td><strong>6 months</strong></td>
<td><strong>3–6 months</strong></td>
<td><strong>Filters: 2 weeks</strong></td>
<td><strong>8-10 hrs.</strong></td>
<td><strong>8-10 hrs.</strong></td>
</tr>
</tbody>
</table>

## COSTINGS

<table>
<thead>
<tr>
<th></th>
<th>Pacsafe Ion</th>
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<th>Surgical mask</th>
<th>N95 respirator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td><strong>$39.95</strong></td>
<td><strong>$12.95</strong></td>
<td><strong>$44.00</strong></td>
<td><strong>$30</strong></td>
<td><strong>$88.95 (incl. filter pack)</strong></td>
<td><strong>0.20</strong></td>
<td><strong>$3.50</strong></td>
</tr>
<tr>
<td>Cost per day (based on lifespan &amp; filter consumption)</td>
<td><strong>0.10</strong></td>
<td><strong>0.03</strong></td>
<td><strong>0.24</strong></td>
<td><strong>0.16</strong></td>
<td><strong>0.64</strong></td>
<td><strong>0.20</strong></td>
<td><strong>$3.50</strong></td>
</tr>
</tbody>
</table>
Because of the unique Silver geometry and highly efficient release mechanism, it works continuously to inhibit the growth of microbes.

Proven efficacy: Silver disrupt bacteria’s metabolism by preventing it from converting nutrients into energy, which inhibits bacteria survival, reproduction and colonization

Active 24/7: The silver ion is constantly presented on the first layer of the mask, ready to be released 24/7

Added level of protection: High Fluid Resistance layer, Advanced High Charged Filter, and Antibacterial lining help to extend the effectiveness of disinfecting

Durable: The Silver remains effective after washings. It stays inert until it comes into contact with microbes. This technology does not wash off or wear away
PM2.5 readings are often included in air quality reports from environmental authorities and companies, and refers to atmospheric particulate matter (PM) that have a diameter of less than 2.5 micrometers, which is about 3% the diameter of a human hair.

Since they are so small and light, fine particles tend to stay longer in the air than heavier particles. This increases the chances of humans and animals inhaling them into the bodies. Owing to their minute size, particles smaller than 2.5 micrometers are able to bypass the nose and throat and penetrate deep into the lungs and some may even enter the circulatory system.

Studies have found a close link between exposure to fine particles and premature death from heart and lung disease. Fine particles are also known to trigger or worsen chronic disease such as asthma, heart attack, bronchitis and other respiratory problems.
Sizing guide

MASK SIZE MEASUREMENT

The most accurate method to determine your size is to measure from your lower eyelid to chin.

Measure in a straight line in front of a mirror.

LOWER EYELID

- S 7.5 - 9.8cm or 2.9 - 3.8inch
- M 9.8 - 10.5cm or 3.8 - 4.1inch
- L 10.5 - 12.2cm or 4.1 - 4.8inch

CHIN

Sizing Chart

Packaging will include a sizing chart helping the consumer to easily measure what size fits them.
Against pathogens

Viruses
Treated fabric samples analyzed by Health and Safety laboratory to look at viral activity. Analysis identified that the treated fabric was effective at reducing the viability of Norovirus applied to them over 0, 5, 30 and 60 minutes. The outcome was a virucidal effect on the test virus by 93% in half an hour and 99% within an hour.

Bacteria
Tests were carried out to determine the benefit of Polygiene treated fabric on treated material. Samples were sent to an independent laboratory and tested for efficacy against different bacteria. Reductions of bacterial numbers using ISO 207 43 were seen against MRSA, Salmonella, Campylobacter, E. coli and VRE.

Disclaimer: The Mask has not been certified by any third party, and has not been certified for clinical environments (such as hospitals, medical clinics, etc.). Wearing the mask is not guaranteed to provide full protection against or fully remove risk of infection, as infection depends on many factors both known and unknown, including without limitation, fit, use, environment, and duration.
Why no valve?

Avoid valved masks

Pacsafe have actively made the decision to not put a breathing valve on the mask. The problem with valved respirators is that they do not filter the wearer’s exhalation, only the inhale. This one-way protection puts others around the wearer at risk, in a situation like Covid-19. It’s for this reason that hospitals and other medical practices do not use valved respirators.
**Carbon vs Static Adsorption**

**Adsorption** is the adhesion of atoms, ions or molecules from a gas, liquid or dissolved solid to a surface. This process creates a film of the adsorbate on the surface of the adsorbent. This process differs from absorption, in which a fluid (the absorbate) is dissolved by or permeates a liquid or solid (the absorbent), respectively. Adsorption is a surface phenomenon, while absorption involves the whole volume of the material. The term sorption encompasses both processes, while desorption is the reverse of it.

**Filtering through Activated Carbon**
Activated carbon works via a process called adsorption, whereby pollutant molecules to be treated are trapped inside the pore structure of the carbon substrate.

Activated carbon filters **can not be washed** to release the solids trapped in the activated carbon. Hence washing of the filter doesn’t reactivate it.

**Filtering through High Charged Static**
Groundbreaking innovation that allows charged particles diversion by magnetic field.

Static filters **are washable** and keeps 98% filtration even after 20 times of washing.

Used in Pacsafe Silver iON Mask
N95 and FFP2

The most commonly discussed respirator type is N95 (these are respirators, not masks). This is an American standard managed by NIOSH – part of the Center for Disease Control (CDC).
Europe uses two different standards. The “filtering face piece” score (FFP) comes from EN standard 149:2001. Then EN 143 standard covers P1/P2/P3 ratings. Both standards are maintained by CEN (European Committee for Standardization).

<table>
<thead>
<tr>
<th>Respirator Standard</th>
<th>Filter Capacity (removes x% of all particles that are 0.3 microns in diameter or larger)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFP2 &amp; P2</td>
<td>At least 94%</td>
</tr>
<tr>
<td>N95</td>
<td>At least 95%</td>
</tr>
</tbody>
</table>