

THE DYNA RANGE

Proven Protection against Coronavirus (SARS-COV2)

PPE with unique biocidal properties

The Power of Dyna-Cidal™

The rationale of the Dyna-Mask™ and Dyna-Safety Cloth™ design is based on the synergy of a biocidal action to kill bacteria with protein denaturing to destroy viruses. When combined with the physical barrier properties of the fabric structure, the potential for point of contact transmission is reduced. Independent analysis at FDA and EPA certified laboratories has demonstrated the ability of Dyna-Cidal™ to kill bacteria and denature virus pathogens on contact.

What makes the Dyna-Mask™ Unique?

- The mask is manufactured to function as both a mask and a respirator.
- It is designed as a sandwich of 4 layers, one layer is impregnated/bonded with a patented antimicrobial biocide that kills pathogens on contact.
- It protects against droplet spray (sneezing and coughing) as well as airborne exposure.
- It is reusable for a minimum of 30 days
- The mask never becomes “loaded” with virus or other pathogens – becoming “hot” as all virus/bacteria are killed on contact.
- CE No 0194, EN149:2001+A1:2009 R

What protection level can it offer?

- Dyna-Mask™ provides a level of safety security and protection exceeding the capacity of all know commercially available masks, including N95 and N100 barrier masks.
- The mask is designed to be worn for long periods of time and does not need to be removed if the outer layer becomes wet through spillage or secretion.
- It meets or exceeds FFP2 IIR and meets or exceeds EN149:2001+A1:2009 R

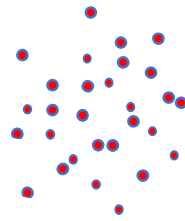
If it has a biocide in it - is it safe to wear?

- There is no contact between the mucous membrane nor any part of the aerodigestive tract and the biocidal compound.
- The biocide is coated onto the hollow fibre SDOB polyester, using electrostatic properties and remains attached within the layers.
- The mask is safe to handle and does not generate any hazardous by-products.
- They are non- toxic and can be disposed of in sanitary landfills.
- They meet stringent safety standards internationally.

Dyna-Mask™



Virus in droplets



Basic commercial mask



Virus in droplets

Dyna-Mask™



Virus builds up on the mask which becomes "hot"

Basic commercial mask

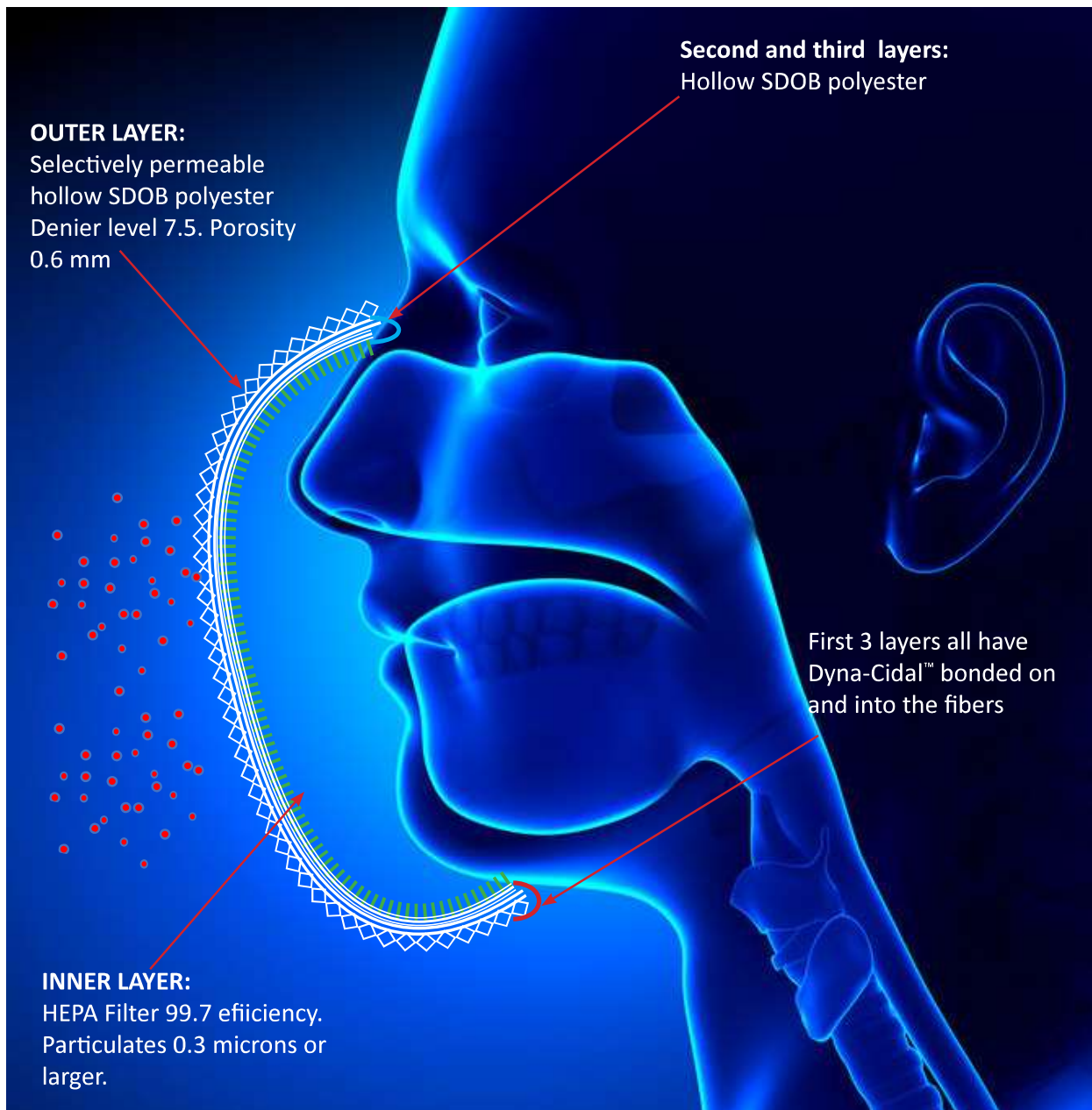


Virus denatured on contact with the Dyna-Mask™

Dyna-Mask™

Dyna-Mask™

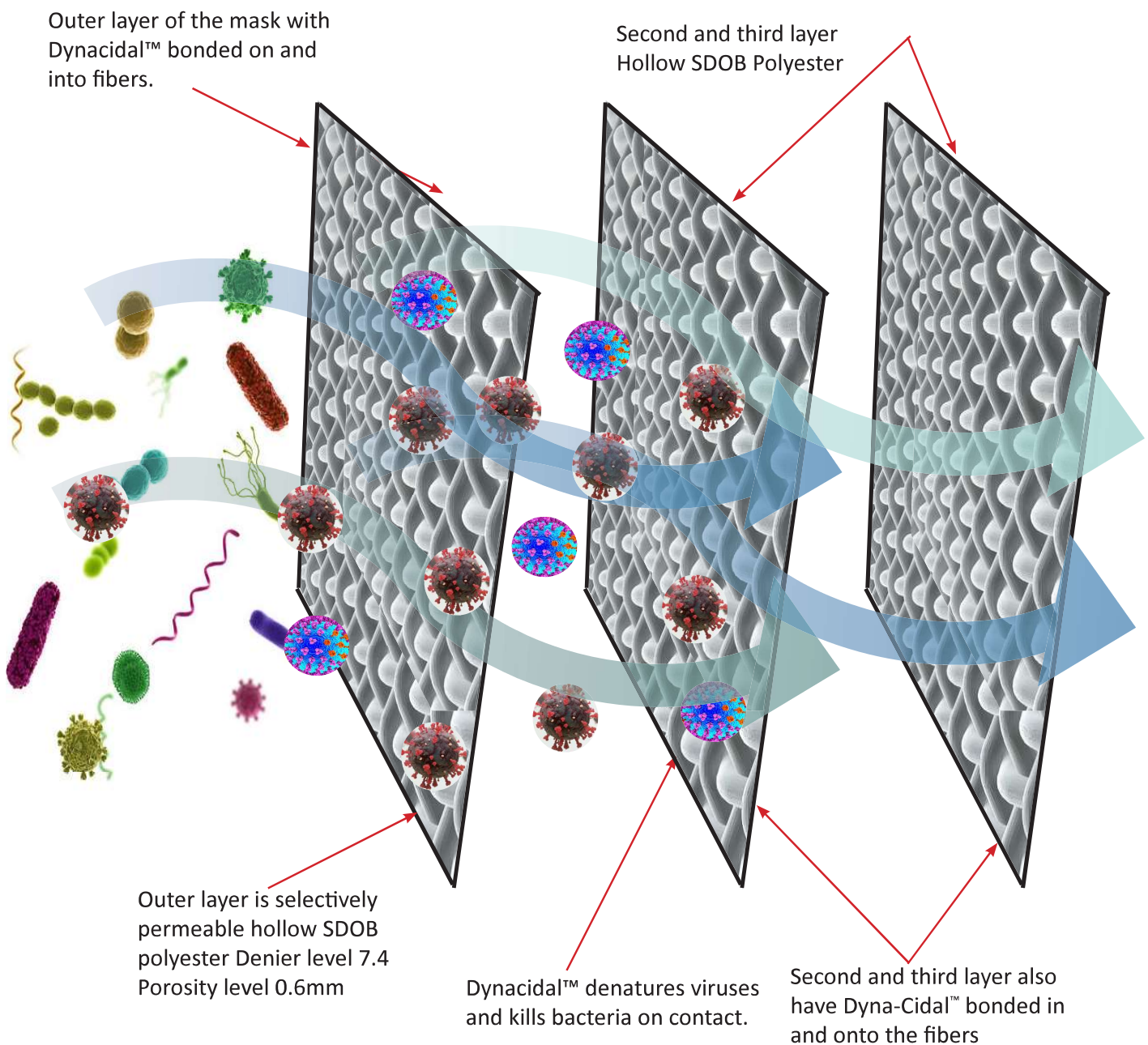
Dyna-Mask™ is a sandwich construction consisting of 4 layers. The first three layers all have our patented biocide, Dyna-Cidal™, bonded on and in the fibers. This denatures viruses and kills bacteria on contact.



HEPA: High Efficiency Particulate Air
EN Rating: EN14683 IIR
EN 149:2001 FFP2 R

Dyna-Mask™

The unique triple layers of Dynacidal™ treated material disrupt the air flow, thereby ensuring that any pathogens present in the inhaled air will be destroyed by the biocide. Having the three layers, provides absolute assurance that only clean air reaches the HEPA filter and finally the nose and mouth of the wearer.



Dyna-Safety Cloth™

What makes the Dyna-Safety Cloth™ Unique?

Similar to the Dyna-Mask,™ the design of the wipe is based on the synergy of using a cell kill biocidal, coupled with the physical barrier properties of cotton fibre layers to denature viruses and kill bacterial pathogens. The product is patent protected.

- The cloth does not use alcohol or other liquids when wiping down hospital surfaces.
- It is reusable.
- It is constructed from a natural cotton fiber onto which the patented antimicrobial biocide /adsorbent is electrostatically bonded.
- It acts as a barrier device – denaturing all viruses and killing bacteria on contact, leaving a protective coating on surfaces that have been wiped down.
- It reduces the transmission of contaminants through droplet and spray exposure (people coughing and sneezing in close proximity) as well as airborne exposure that lands on surfaces.
- It offers the most effective protection for first responders and health care providers against most known surface pathogenic micro-organisms.
- The cloth is a highly effective decontamination device.

If Dyna Safety Cloth™ has a biocide in it - how safe is it to use?

- The Dyna-Safety Cloth™ is exceptionally safe to handle.
- It does not generate any hazardous by-products
- Dyna-Safety Cloth™ is non- toxic.
- It can be disposed of in sanitary landfills
- It meets stringent standards internationally.

Where was Dyna-Cidal™ developed?

Dyna-Cidal™ is the patented proprietary property of Dynamic Adsorbents, Inc. of Atlanta, Georgia.



List of Pathogens killed on contact with Dynacide™

Broad coverage:

Bacteriostatic and bacteriocidal effects of Dyna-Cidal™ have been demonstrated against a wide variety of microbial organisms including pathogenic viruses, bacteria, yeast and fungi.

Dyna-Cidal™ is Biocidal Against the following Micro-Organisms

- Mycobacterium species-kansasii, leprae, mycobacterium avium complex, smegmatis
- Pseudomonas aeruginosa
- Staphylococcus species
 - including MRSA
- Streptococcus pneumoniae
- Legionella pneumophila
- Pneumocystis carinii
- Listeria monocytogenes

Bacterium:

- Bacillus anthracis, subtilus and spores
- Moraxella species – including moraxella species and Kingella
- Haemophilus influenza
- Mycoplasma pneumoniae
- Chlamydia pneumoniae and psittaci
- Actinomycosis
- Rickettsia (rickettsii, conorii, typhi, prowazekii, burnetti)
- Escherichia coli

Viruses:

- H1N1 Influenza
- Bird Flu
- Swine Flu
- Respiratory Syncytial Virus
- Rhinovirus
- **Coronavirus**
- Herpes simplex virus
- MERS
- Picornaviridae- poliovirus
- Epstein Barr Virus – such as infectious mononucleosis
- Cytomegalovirus
- Variola major – Smallpox
- Orthopoxvirus-human monkeypox virus
- Parvovirus – B 19

Fungi:

- Aspergillus fumigatus and niger
- Candida species

