



The antibacterial and anti-viral mask leverages world-class graphene technology

#### **Key product advantages**

- The mask offers enhanced antibacterial and antiviral protection for its wearer
- Use of an advanced graphene materials provides robust strength whilst providing thermal cooling properties
- The 4-ply layer design ensures breathability and reusability
- The mask is comfortable to wear, with adjustable ear loop straps

#### What does KN95 mean?

KN95 indicates that this mask will prevent at least 95% of particles larger than 0.3 microns in size from entering it when worn correctly with a proper fit.

The different names and abbreviations of N95, KN95 or FFP2R face masks all similarly provide 95% protection or more, the only difference is the origin of manufacture.



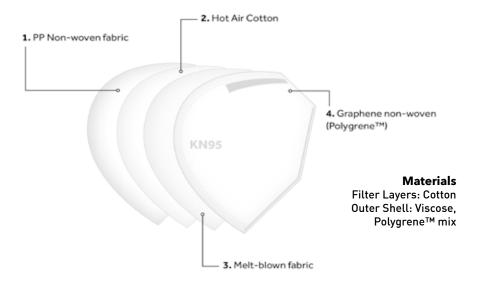


# PRODUCT INFORMATION - KN95 / FFP2R

# Graphene Enhanced Protective Face Mask

# Enhanced protection, improved comfort

To help provide enhanced protection against airborne bacteria and to minimise the spread of viral infection, the mask has a robust four-ply design which uniquely boosts filtration.



The four-ply arrangement offers users a beneficial level of protection against airborne allergens, pathogens, pollen, and dust particles that are larger than 0.3 microns in size – providing a minimum level of filtration of 95%.

The mask provides improved breathability, and offers significant comfort when worn. The 'one-size-fits-all' solution is enabled via adjustable ear loop straps to supply extra comfort.

# Made with Polygrene™ featuring Nanene™ - the world's only Verified Graphene Product

The mask is enhanced with a coated layer utilising Polygrene<sup>™</sup>. Polygrene<sup>™</sup> is an advanced graphene-based material featuring Nanene<sup>™</sup> – the world's only independently Verified Graphene Product certified by The Graphene Council.

The addition of graphene to polymers provides many benefits including allowing innovative products to be developed utilising existing production processes. The Polygrene<sup> $\mathrm{TM}$ </sup> is blended with a sustainably sourced cellulose (viscose) material mix.



### PRODUCT INFORMATION



The mask is certified to meet standards EN 149:2001+A1:2009 and BS EN 14683-2019

#### What is graphene?

Graphene, first isolated in 2004 by two researchers at The University of Manchester, has been hailed as the wonder material that will revolutionise materials. At just a one-atom-thick fabric of carbon which has been theoretically shown to have remarkable physical properties including exceptional strength-to-weight, effective electrical and thermal conductors as well as be highly flexible.

#### What is Nanene™?

Nanene™ is a high quality fewlayer graphene produced using a patented manufacturing method. Developed on the University of Manchester campus and then scaled up in a dedicated production facility, Nanene™ is a product that offers independently verified, real world application, performance benefits.

#### What is Polygrene™?

Polygrene™ is a new graphene polymer range. It delivers a wide range of improvements including in tensile strength properties, among other high performance characteristics.

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#### Certification

This Maximum Protection Graphene Face Mask (KN95) meets the requirements of EN149:2001+A1:2009 and BS EN 14683-2019 are CE-marked in accordance with the requirements of European Directive EU 2016-425. The mask's antibacterial performance is certified according to GB/T 20944.2.2007. The anti-viral performance is certified according to ISO18184:2014(E). The mask is enhanced with a coated layer utilising Polygrene,™ an advanced graphene-based material featuring Nanene™ from Versarien. It produces few-layer graphene powder according to ISO/TS 80004-13:2017(en). It is also registered based on Article 20(2) of Regulation (EC) No 1907/2006 ('REACH') to manufacture/import the substance, or produce or import an article containing graphene between 1 and 10 tonnes/year (Reg. no: 01-2120768618-38-0005).

# General product information

TECHNICAL INDEX ANALYSIS			CONTACT ANALYSIS OF MATERIAL			
Purpose	FACIAL MASK		Raw Materials	Content (%)	Weight (g) (with packaging)	
Specification	15.2 x 10.5cm		Outer layer -	28.6	3.146	
British Standard	BS EN 14683-2019		Graphene (Polygrene™)			
European Union Standard	EN 149:2001+A1:2009		PP non-woven fabric	14.2	1.562	
Product Performance	PFE ≥ 94%, Reached N95 level		Melt-brown fabric	28.6	3.146	

#### Disclaimer

As with all Protective Face Masks and Personal Protective Equipment (PPE) in general, use of this product does not guarantee that the user will not become exposed to any airborne bacteria and/or viral infections. However, the risk of such exposure will be significantly reduced by the use of this product in accordance with the Instructions for Use below.

#### Instructions for Use

- Users should be trained and instructed in how to wear a mask.
- The oxygen concentration of the ambient atmosphere should be at least 19.5 % volume.
- The mask is not intended to protect against toxic gases and vapours.
- Tampering, altering or modifying the mask will decrease, and in some cases eliminate the mask's effectiveness.
- The useful life of the mask will depend upon the environment in which the mask is stored, exposed and worn, together with the particles that the mask is exposed to, both when in use and when not.
- Masks should be disposed of and replaced if damaged, or when the user has cause
  to believe that exposure and use of the mask may have caused the filter to become
  ineffective ('congested').
- The user is advised to stop wearing the mask should any allergic skin reaction occur and seek medical advice if necessary.

Reusable for longer use: When handled with care, the mask can be reused. Keep the mask within its resealable pouch packaging for longer lasting use. If the mask is not carefully handled, protective properties in the mask may deteriorate. At such times, the mask is still effective as a face covering. The mask's filtration may become less effective after washes. Through its ongoing research and testing, Versarien recommends use of a disinfectant spray as an effective approach to enable the mask to provide continuous protection against viruses and bacteria. For full care instructions see page 3.

# General handling information

**Storage and transport:** Store in cool, dry, well-ventilated area away from strong oxidising agents. No special transport requirements.

**Waste and disposal:** Safely place in a sealed container for disposal in accordance with local waste regulations. Can be incinerated in an approved facility.

Fire: Use appropriate extinguishing media, according to the surrounding area.

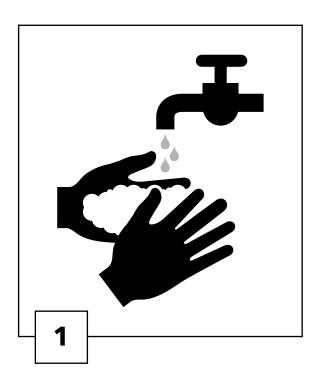
Reactivity: Avoid naked flames and ignition sources, particularly where loose, discarded masks are left. Avoid contact with strong oxidizing agents.

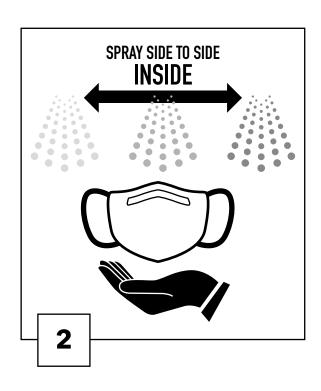
**Environmental Issues:** No environmental issues are expected for the mask. The pouch packaging is recyclable.

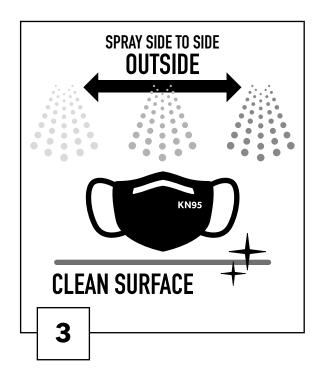


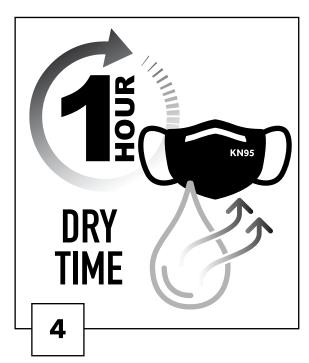
# **CARE INSTRUCTIONS**

- 1. Clean hands effectively and dry before handling mask.
- 2. Hold the mask with the inside facing up. With the disinfectant spray nozzle perpendicular to the mask, press the trigger fully whilst at the same time moving the spray from one side of the mask to the other and back again, keeping the nozzle at a 30cm (12 inch) distance from the mask at all times. Spray once only. WARNING: Spraying in one position, too close to the mask or spraying multiple times will lead to over-wetting that may cause the mask to become ineffective.
- 3. Turn over the mask and place on a clean, dry surface. Repeat spraying on outside of mask as described in Step 2.
- **4.** Leave mask to air dry naturally for 1 hour at room temperature before storing away. If the mask was not sprayed satisfactorily, wait for 1 hour before repeating the cleaning process.



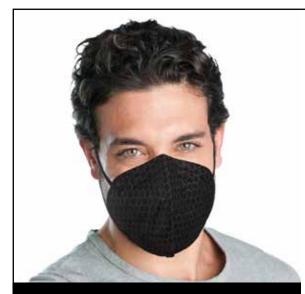








# **ORDER INFORMATION**



**ADULT Graphene Face Mask Range** 



GFM95A-BK Adult Face Mask in Black



GFM95A-RD Adult Face Mask in Red



GFM95A-YW Adult Face Mask in Yellow



**GFM95A-GN** Adult Face Mask in Green



GFM95A-PK Adult Face Mask in Pink



GFM95A-BE Adult Face Mask in Blue



GFM95C-BK Child Face Mask in Black



GFM95C-RD Child Face Mask in Red



GFM95C-YW Child Face Mask in Yellow



GFM95C-BE



**CHILD Graphene Face Mask Range** 



GFM95C-GN Child Face Mask in Green



GFM95C-PK Child Face Mask in Pink



Child Face Mask in Blue



**GFM-DIS** Versarien Face Mask Disinfectant Spray

**MASK DISINFECTANT SPRAY** 

# DISINFECTANT SPRAY INFORMATION

- ✓ Disinfectant
- Antiseptic
- ✓ Kills 99.9999% of viruses and bacteria
- pH balanced
- ✓ Non-sting

Spray is effective when used on Versarien's Graphene Enhanced Protective Face Mask for up to 10 cycles. www.versarien.com/mask