

PRODUCT INFORMATION - FFP2/KN95

Freedom1 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.

Driven by necessity, guided by science and technology.

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

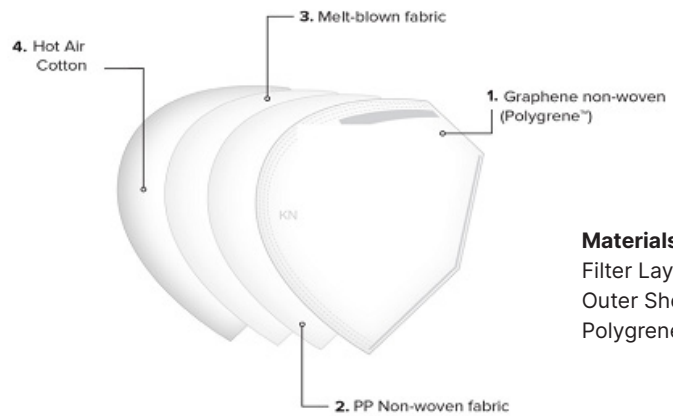
Key product advantages

- . Antiviral and Antibacterial
- . Multi-standard Certified
- . Re-usable
- . Washable
- . Adjustable for comfortable fit

What do standards like FFP2 and KN95 mean?

These standards are indication that the mask has been tested and verified that it will protect the wearer from at least 95% of airborne particles entering it when worn correctly with a proper fit. Filtering capability can vary from different manufacturers. The Freedom1 has a capability down to 0.3 microns which allows filtration of particles up to 8 times smaller than similar certified non Graphene based products.

The different abbreviations depend on the standards origin. FFP2 is a European PPE standard and is considered to be a benchmark for capability, KN95 is a Chinese standard and commonly used.



Materials
Filter Layers: Cotton
Outer Shell: Viscose, Polygrene™ mix

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 outer layer utilising Polygrene.™ Polygrene is an advanced graphene-based material featuring Nanene™ – the world's only independently Verified Graphene Product certified by The Graphene Council.

The Freedom1 mask has full CE certification and conform to both British and European standards. The Freedom series masks give referenceable protection to employees in all organisations and industries whether they work in public spaces or close contact with colleagues, including Transport and Travel, Hospitality, Care, Universities, Schools, Educational establishments and any business following UK Health and Safety and WHO guidelines.

Freedom series: it's the intelligent choice for getting business back on track.

PRODUCT INFORMATION



The Freedom1 mask is certified to meet FFP2/KN95/BS and CE standards.

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 few-layer 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.

How to Contact Us

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Certification

This Maximum Protection Graphene Face Mask meets the following standards as well as being CE-marked in accordance with the requirements of European Directive EU 2016-425.

European Standard EN 149:2001 + A1:2009 FFP2

British Standard BS EN 14683:2019

KN95 Certified

Antiviral certification to ISO 18184:2014 (E)

Antibacterial certification is to GB/T 20944.2.2007

TECHNICAL INDEX ANALYSIS

Purpose	FACIAL MASK (One-size-fits-all)
Distributed by	PPE Defends, Unit 19 Admiralty Way, Camberley, Surrey, UK, GU15 3DT
Specification	15.2 × 10.5cm
British Standard	BS EN 14683-2019 / GB 2626-2019 KN95
European Union Standard	EN 149:2001+A1:2009 FFP2
Product Performance	PFE ≥95%, Reached KN95 level
Anti-bacterial/anti-viral	GB/T 20944.2.2007 / ISO 18184:2014 (E)



Type: Graphene Protective Mask
Model: Graphene – Freedom1
Production date: July 2020
Lifetime: 5 years (if unopened)
Storage conditions: Room temperature (no more than 80% humidity)
Please refer to the information provided by the distributor.

For full product information, visit:
www.PPEdefends.com

Product use and handling information

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.

Storage and Transport

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

Waste and Disposal

Waste: Safely place in a sealed container for disposal.

Disposal: In accordance with local waste regulations.

Can be incinerated in an approved facility.

Used: Masks may need to be disposed of in accordance with the local authority's infectious waste requirements.

Fire Hazard

Extinguishing Media: According to the surrounding area.

Any standard fire extinguisher may be used.

Reactivity

Conditions to Avoid: Naked flames and ignition sources, particularly where loose, discarded masks are left.

Incompatible Materials: Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, and carbon dioxide.

Environmental Issues

No environmental issues expected.

Packaging material should be separated for recycling.