Preventing COVID-19:
Choose the right Mask

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HOW TO CHOOSE:

THE RIGHT MASK FOR THE CORONA VIRUS COVID-19?

COVID-19 has increased rapidly throughout the world. From the US, the CDC and WHO say that you should:

Socially isolate as much as possible
Open the window and keep the air clean and moving
Clean your hands often using soap and water or
(use 70% alcohol gel or our Disinfectant Wet Wipes)
Avoid touching animals etc.

When you go outside, it is better to wear a mask because the coronavirus is invisible and pervasive. You do not know if others already have the virus or not. Also asymptomatic infections also spread the virus.

We have received many inquiries from customers, most of them about N95 masks. However; is it necessary for ordinary people to wear N95 masks? The following guide on how to choose a mask may help.

Three-layer mask (3Ply disposable Face Mask): composed of three layers of non woven fabrics

PP spunbond + Meltblown + PP spunbond

Outer and Inner layers are made of PP spunbond non-woven fabric: liquid splash-proof and water poor.

The middle layer (filter layer) is a meltblown non-woven fabric.and the materials are BFE90 meltblown,BFE95meltblown,BFE99 meltblown,N90 meltblown,etc….

If the outer and inner layers of the mask are made of SMS non-woven fabric, the level of the mask will be higher. The higher the filtering level, the greater the ability to block viruses.

KN95 mask and N95 mask

The N95 mask is one of nine particulate protective masks certified by NIOSH (National Institute for Occupational Safety and Health). N95 is not a specific product name. As long as it meets the N95 standard and passed the NIOSH review, it can be called a N95 mask, which can filter particles with an aerodynamic diameter of 0.075μm ± 0.020μm and achieve an efficiency of more than 95%.

(Above is a high end N95 mask with valve.)

KN95 masks / N95 masks can be interpreted as masks that can meet national filtering standards.

In fact, the filtering effect of KN95 is the same as that of N95, and it can also be understood as KN95 = N95.
The “KN” or “N”letters stand for national standards, and the “95” numbers stand for filtering levels.

N series is American standard.
KN series is Chinese standard.
FFP series is European standard.
KF series is Korean standard.

“85”, “90”, “95”, “99”, Represents the level of filtering.

Here is a simple, easy to understand formula:

KN99 > KN95 > KN90.
N99 > N95 > N90.
BFE99 > BFE95 > BFE90.
FFP3 > FFP2 = N95 = KN95=KF94> KN90.

N95 / KN95 is not a specific product name, as long as it meets the N95 / KN95 standard mask, it can be called N95 / KN95 mask

In general, to resist viruses（COVID-19）and flu, the N95 series is sufficient

N95 is produced according to the American standard NOISH;
FFP2 is the European standard EN149;
KN95 is the Chinese standard GB2626-2006.

All three types of masks are qualified masks. See the table below:

Mask Type	Standards	Filtration Effectiveness		
Single Use Face Mask 	China: YY/T0969	BFE: ≥95% PFE: ✗		
Surgical Mask 	China: YY 0469	BFE: ≥95% PFE: ≥30%		
	USA: ASTM F2100	Level 1	Level 2	Level 3
		BFE: ≥95% PFE: ≥95%	BFE: ≥98% PFE: ≥98%	BFE: ≥98% PFE: ≥98%
	Europe: EN 14683	Type I	Type II	Type III
		BFE: ≥95% PFE: ✗	BFE: ≥98% PFE: ✗	BFE: ≥98% PFE: ✗
Respirator Mask 	USA: NIOSH (42 CFR 84) China: GB2626	N95 / KN95	N99 / KN99	N100 / KN100
		0.3 μm: ≥95%	0.3 μm ≥ 99%	0.3 μm ≥ 99.97%
	Europe: EN 149:2001	FFP1	FFP2	FFP3
		0.3 μm: ≥ 80%	0.3 μm: ≥ 94%	0.3 μm: 95%

BFE: Bacteria Filtration Efficiency. Efficiency at capturing bacteria (3.0 microns)
PFE: Particle Filtration Efficiency. Efficiency at capturing particles (0.1 microns)
0.3 μm: Most Penetrating Particle Size (MPPS). This is the most difficult sized particle to capture.

How to choose the mask you need to help protect yourself.

Healthy person:

Reduce outings and parties. Wear three-layer masks when going out for shopping. Of course, if you wear masks with high filtering level, the safety level will be higher.

Service personnel or people working in the medical field, such as police officers, and supermarket service personnel, etc. These people have more contacts and interactions with

others, and it is recommended to wear masks with high filtering levels, KN95 mask / N95 mask / KF95 mask / FFP2 mask.

High-risk personnel, nurses, or doctors. Must to choose a mask with a high filtering level. In addition to KN95 mask / N95 mask / KF95 mask / FFP2 mask. In addition to these masks, you can also choose FFP3 mask, N99 mask, KN99 mask, etc.

You can keep your home ventilated, wash your hands frequently, and measure your body temperature every day. If you find that your body temperature is raised, consult a doctor without delay. Wearing a mask not only protects yourself but also others.

Reference standards for mask grades in different countries

China:
GB15979-2002 Hygienic Standard for Disposable Sanitary Products
GB19083-2010 Technical requirements for medical protective masks
GB / T 32610-2016 daily protective mask technical specifications
YY / T 0969-2013 disposable medical mask
YY 0469-2011 surgical masks

Australia:
AS / NZS 1716: 2012
P1: Minimum filtering effect> 80%
P2: Minimum filtering effect> 94%

EU:
EN 149-2001 A1-2009
Respiratory protection Filter half masks for particle protection Requirements, testing and marking
FFP1 category masks: minimum filtering effect> 80%
FFP2 mask: minimum filtering effect> 94%
FFP3 category masks: minimum filtering effect “97%
EN 136-1998 AC-2003
Respiratory protection Full face mask Requirements, testing and marking
EN 14683-2019 AC-2019
Medical masks-Requirements and test methods

United States:
ASTM F2100-2019 Standard Specification for Material Performance of Medical Masks

REMEMBER: Any mask cannot stop you getting the virus, BUT it can help you inhaling micro-droplets from others, it can help you reduce the number of times you touch your own face with your hands, and IF you have the virus, it can help you spreading the virus to others: If in doubt wear a mask!

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