

DESCRIPTION

KF94 mask is a Fine Dust & Hygiene Mask which is equivalent to an N95 mask. N and KF denotes rating by NIOSH (National Institute for Occupational Safety and Health) and MFDS (Ministry of Food and Drug Safety, formerly KFDA), respectively. MFDS is Korea's agency who rates masks, similar to NIOSH. The number represents the percentage of particles prevented by the mask. This mask is effective in prevention of PM2.5 air particles - particles which are lower than 2.5 micron in size.

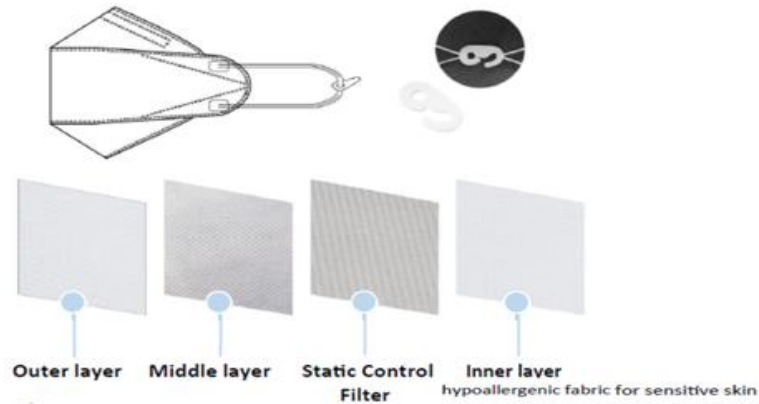
KF94 Mask is also a US-FDA approved face mask intended to be worn by general public or healthcare personnel per IIE guidance.


FEATURES

- High Efficiency particulate air filter (HEPA)
- 3D Cubic design with Nose support wire which keeps glasses free of fogging
- Composed of 4-layer filter for protection

APPLICATIONS

- Prevention of epidemics, disease, fine dust, haze
- Prevention of PM2.5 and PM1.0 particles

TECHNICAL DATA
Mask Construction:

[Material]

- ✓ 1 : **Outer** – Polypropylene Spun bond Non-woven
- ✓ 2 : **Inner** – Polypropylene Spun bond Non-woven
- ✓ 3 : **Filter** – Melt blown Non-woven
- ✓ 4 : **Support Plate** – Polyester Non-woven
(Polyethylene 50% + Polypropylene 50%)
- ✓ 5 : **Nose Wire** – Polyvinyl Chloride Steel Wire
- ✓ 6 : **Ear band** – Nylon

Mask Specification:

Description	Unit	Standard
Width	mm	210 ± 5
Length	mm	78 ± 5
Color	-	White/Black
Ear Band Length	mm	165 ± 10
Nose Wire Length	mm	88 ± 5
Static Electricity	volt	≤ 100

Mask Test Results:
Efficiency Test results:

	Specs	Results
Mask Inhalation Resistance (Differential Pressure)	≤70Pa at air flow of 30L/min	31, 36, 34
Filter media dust capture efficiency		
NaCl aerosol	≥ 94%	98, 98, 98
Paraffin oil	≥ 94%	99, 99, 99
Facial area leakage rate	<11%	4.3
Tensile Strength	Specimen must not break on 10N	29

Mask Performance:

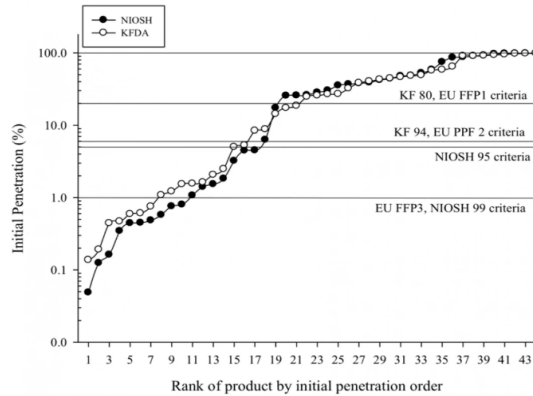
Bacterial Filtration Efficiency, BFE	≥ 95%	≥ 99% at 3.0micron
Sub-micron Particulate Filtration Efficiency, PFE	≥ 95%	≥ 94% at 0.4micron
Differential pressure "breathability"	<4.0mmH ₂ O/cm ²	<7.2 mmH ₂ O
Fluid penetration resistance	80mmHg	80mmHg

KF94 (MFDS certified) Mask Performance vs NIOSH and EU Protocols:

MASK	KOSHA (Korea)		NIOSH (USA)	EU	Filtration Efficiency
	Health	Industrial			
type 1	Surgical Mask		Surgical Mask		
type 2	Yellow dust mask (KF80)	Respirator (FFP1 / 80)		P1 (80)	> 80%
type 3	Disease Prevention mask (KF94)	Respirator (FFP2 / 94)	N95	P2 (94)	> 94~95 %
type 4	KF99		N99		> 99%
type 5		Special (99.95)		P3 (99.95)	

Below is a comparison between NIOSH and MFDS (KFDA) masks in terms of % initial penetration. N95 results showed 5% penetration, thus 95% filtration while KF94 showed 6% penetration, 94% filtration. KF94 meets the maximum penetration vau of 6% based on MFDS criteria - this criteria is based on EU standard.

Jung et al., Aerosol and Air Quality Research, 14: 991–1002, 2014



NIOSH (N) masks VS KFDA (KF masks). Hyejung Jung, Jongbo Kim, Seungju Lee, Jinho Lee, Jooyoun Kim, Perngiy Tsai, Chungsik Yoon. [Comparison of Filtration Efficiency and Pressure Drop in Anti-Yellow Sand Masks, Quarantine Masks, Medical Masks, General Masks, and Hankerchiefs](#). 2014.

ASTM F2100-11 Standards	ASTM Level 1 Mask	ASTM Level 2 Mask	ASTM Level 3 Mask
Fluid Resistance, mmHg	80	120	160
BFE, @ 3 micron	≥95%	≥98%	≥98%
PFE, @ 0.1 micron	≥95%	≥98%	≥98%
Delta P, mm H2O/cm2	< 4.0	< 5.0	< 5.0
Flame Spread	Class 1	Class 1	Class 1

Packaging: 50 pcs/box, 10 boxes/case

ORDERING
INFORMATION