

DESCRIPTION

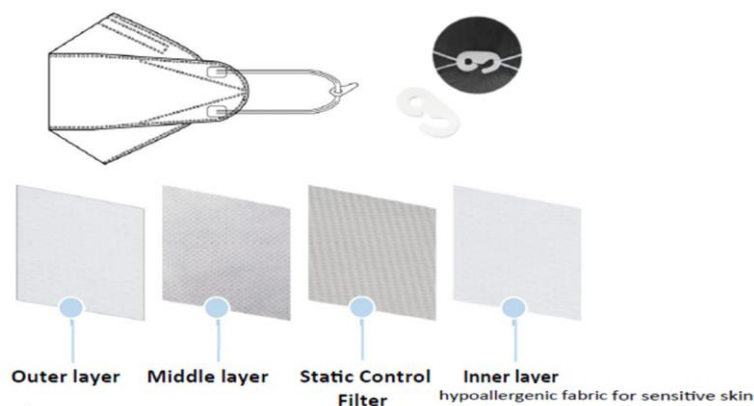
KF94 mask is a Fine Dust & Hygiene Mask which is equivalent to an N95 mask. N and KF denotes rating by NIOSH (National Institute for Occupational Safety and Health) and KFDA (The Korean Ministry of Food and Drug Safety), respectively. KFDA is Korea's agency who rates masks, similar to NIOSH. The number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

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:

Mask Inhalation Resistance
(Differential Pressure)
Filter media dust capture efficiency
NaCl aerosol
Paraffin oil
Facial area leakage rate
Tensile Strength

Specs

≤70Pa at air flow of 30L/min
≥ 94%
≥ 94%
<11%
Specimen must not break on 10N 29

Results

31, 36, 34
98, 98, 98
99, 99, 99
4.3
80mmHg

Mask Performance:

Bacterial Filtration Efficiency, BFE
Sub-micron Particulate Filtration Efficiency, PFE
Differential pressure "breathability"
Fluid penetration resistance

≥ 95%
≥ 95%
<4.0mmH₂O/cm²
80mmHg

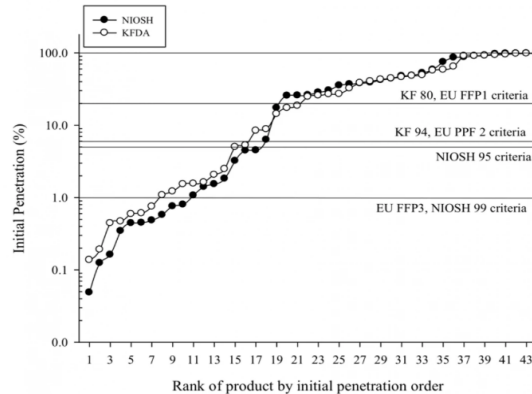
≥ 99% at 3.0micron
≥ 94% at 0.4micron
<7.2 mmH₂O
80mmHg

KF94 (KFDA 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 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 value of 6% based on KFDA 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, Perngji Tsai, Chungsik Yoon. [Comparison of Filtration Efficiency and Pressure Drop in Anti-Yellow Sand Masks, Quarantine Masks, Medical Masks, General Masks, and Handkerchiefs](#). 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 H ₂ O/cm ²	< 4.0	< 5.0	< 5.0
Flame Spread	Class 1	Class 1	Class 1

Packaging:

1 Pc/Bag, 50 Bags/Box, 10 Boxes/Case



**ORDERING
INFORMATION**