

# KN95 Surgical Respirator

## Technical Data Sheet

The Life Biotech KN95 respirator provides a lightweight, comfortable respiratory protection against dusts, mists, fumes and smoke. An effective respiratory protection for use in industries where potential exposure to dust particles and/or non-volatile liquid particles can occur.

The KN95 is an excellent choice for work settings involving heat, humidity and extended periods of wear time due to its lightweight, multilayer design which harnesses the latest in technology advances.

## Features

- Complies to AS/NZS 1716:2012
- Filter Material provides effective filtration with low breathing resistance for consistent high quality performance
- Includes a super-soft, cushioned inner lining
- TGA Listed 333412
- Fluid Resistant 160 mmHg
- Flammability Rating Class I
- Adjustable nose clip
- Ear loop style
- For use against both mechanically generated particulates e.g. dusts, mists and thermally generated fumes & smokes

**PARTICULATE RESPIRATOR KN95**  
**Single-use filtration efficiency >95%**

Keep out droplets, more reassured to go out  
Apply ultra-fine filter material, better protection effect

**FOUR-LAYER FILTRATION TECHNOLOGY**

- Fine quality non-woven cloth**  
Skin friendly & environmental protection, filtering dust & particles
- Cotton filter**  
Hygroscopic & sweat releasing, good breathability
- Meltblown non-woven cloth**  
Filter non-oily particles in the air
- Skin-friendly non-woven cloth**  
Soft skin-friendly fabric, non-irritant, comfortable

The following materials are used in the production of the Surgical KN95 Respirator:

## Materials

Nose Wire	Plastic Laminate
Attachment	Loop securement
Top Layer	Non Woven Polypropylene
Second Layer	Cotton Filter
Filter	Meltblown Non-woven
Inner Layer	Non Woven Polypropylene

**This mask does not contain components made from natural rubber latex.**



## Used For

- Laser Surgery/Electrocautery
- Exposure to infectious aerosols via airborne Aerosol transfer
- Dental care where aerosol & particle exposures are possible
- Foundries
- Bush fire fighting
- Furnaces
- Leadwork
- Light Welding

## Standards

- CE Test Report No. STS200313711101R
- ASTM F2100 level 3 - GZHT02280291
- Certified to GB2626:2006 KN95 requirements for a minimum 95% filtration efficiency against solid and liquid aerosols that do not contain oil
- Meets the requirements of AS/NZS 1716:2012 for P2 to protect the wearer from solid and non-volatile liquid particles only
- Products are classified under AS/NZS 1716:2012 by filtering efficiency and maximum total inward leakage performance
- BFE (Bacterial Filtration Efficiency) F2101 - >98%
- Resistance to Synthetic Blood 1862 - 160 mm Hg
- PFE (Particulate Filtration Efficiency) F2299 - >98%
- Delta P (Differential Pressure) MIL-M 36954C - <5.0
- Flame Spread 16 CFR part 1610 - Class 1
- Australia TGA listed 333412



Packaging	Product Code	Order Code
40 Masks/Box	LBKN95B40	LBKN95B40

## Measuring fluid resistance, filtration and breath-ability ASTM categorizes masks into three levels

### ASTM Level 1

For procedures producing low amounts of fluid, spray and/or aerosols.

Fluid Resistance  
**LEVEL 1**



### ASTM Level 2

For procedures producing light to moderate amounts of fluid, spray and/or aerosols.

Fluid Resistance  
**LEVEL 2**



### ASTM Level 3

For procedures producing moderate to heavy amounts of fluid, spray and/or aerosols.

Fluid Resistance  
**LEVEL 3**

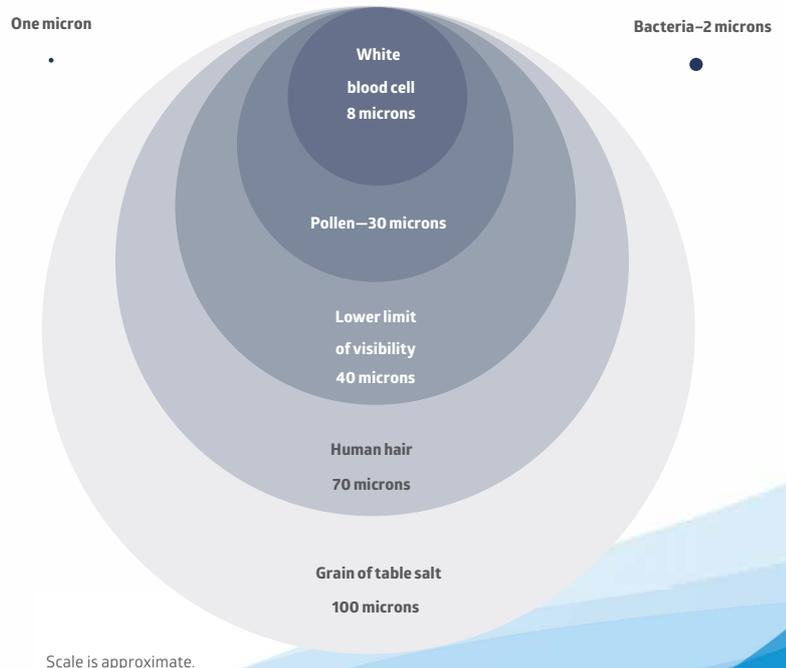


To meet ASTM standards, our masks undergo a series of tests for particle filtration (PFE), bacterial filtration (BFE) and differential pressure or breath-ability ( $\Delta P$ )

	Level 1 Low fluids	Level 2 Light to moderate fluids	Level 3 Moderate to high fluids
PFE at 0.1 micron ASTM F2299	 $\geq 95\%$	 $\geq 98\%$	 $\geq 98\%$
BFE at 3.0 micron ASTM F2101	 $\geq 95\%$	 $\geq 98\%$	 $\geq 98\%$
Delta P ( $\Delta P$ ) mm H <sub>2</sub> O/cm <sup>2</sup> MIL-M-36954C	 $< 4$	 $< 5$	 $< 5$

## How small is a micron?

While an actual micron is not visible to the human eye, this magnified diagram demonstrates particulate size by comparing a micron to other common substances.



## Fitting Instructions

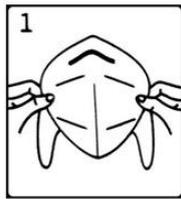
**Must be followed each time the respirator is worn. Before fitting device, ensure hands are clean.**

See Figure 1 below

All respirator components should be inspected for damage prior to each use.

1. With reverse side up and using the tab, separate the left and right panels to form a cup shape. Bend slightly at centre of the nose clip.
2. Ensure both panels are fully unfolded.
3. Cup respirator in one hand with open side towards face. Take both straps in other hand. Hold respirator under chin, with nose piece up, and pull straps around the ears.
4. Straps must not be twisted. Adjust left and right panels for a comfortable fit, ensuring the panels and chin tab are not folded in.
5. Using both hands, mold the nose clip to the shape of the lower part of the nose to ensure a close fit and good seal. **Pinching the nose clip using only one hand may result in less effective respirator performance - use two hands.**
6. The seal of the respirator on the face should be fit checked before entering the workplace.

Figure 1



1. Unfold the mask and put it on your face. The soft nose clip is on the nose bridge



2. Press the nose clip gently with your fingertips and make it fit well along the nose bridge



3. Extend the mask up and down, so that it covers your face completely



✓ Multi-layer filtering

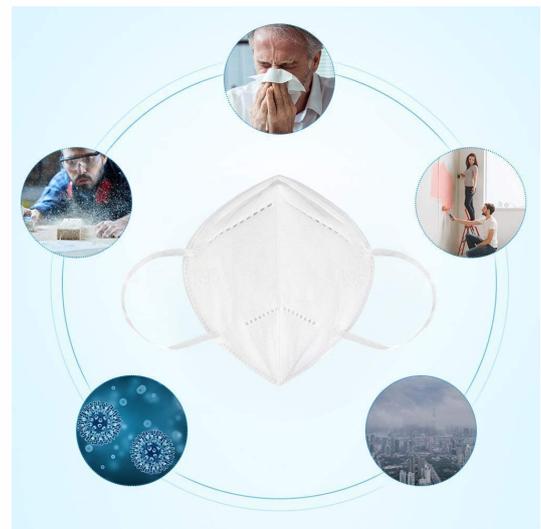
✓ Effectively prevent droplet haze

✓ Filtration rate  $\geq$  95%



Always be sure that the KN95 respirator is:

- Suitable for the application
- Fitted correctly
- Worn during all periods of exposure
- Replaced when necessary



- It is recommended that fit testing be conducted before assigning a respirator to an individual. If you cannot achieve a proper fit then do not enter contaminated area. See your supervisor.
- Inspect the respirator before each use to ensure it is in good working condition. Examine all the respirator parts for signs of damage including the two straps and nose-clip. The respirator should be disposed of immediately upon observation of damaged or missing parts.
- Leave the contaminated area immediately and contact supervisor if dizziness, irritation or other distress occurs.
- Dispose of used product in accordance with applicable regulations.
- All respirators should be used in accordance with local regulations.
- Do not alter, repair, wash, and abuse or misuse the respirator.
- Do not use with beards or other facial hair or conditions that prevent a good seal between the face and the sealing edge of the respirator.
- The respirator can help protect the wearer's lungs against certain airborne contaminants; however, it will not prevent entry through other routes such as the skin or eyes, which would require additional personal protective equipment (PPE).
- Maximum Operating Temperature: +50 degrees Celsius.
- The filtration efficiency of the respirator may decrease in the presence of oily mists.

## Storage and Transportation

Shelf life of the unopened product is two (2) years from the date of manufacture when stored within the temperature range of  $-20^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$  and at less than 80% relative humidity. End of shelf life date is marked on the product packaging. Before initial use, always check that the product is within the stated shelf life. When storing or transporting this product use original packaging provided.