

## Medical/Surgical Mask - Type II and IIR



### PURPOSE

To protect :

- The wearer against microorganisms transmitted by **droplets**.
- The environment against the transmission of the droplets and aerosols by the wearer.

The "R" stands for repellence of projection of blood or liquid onto the mask, which is essential for surgeons, and therefore the name as Surgical Mask.

Useful in the sense of **expiration**

### WHAT THE WHO SAY ABOUT THEM

*« these are made from a minimum of three layers of synthetic nonwoven materials, and configured to have filtration layers sandwiched in the middle. These masks are available in different thicknesses, have various levels of fluid-resistance and two levels of filtration. These medical masks reduce the transfer of saliva or respiratory droplets from the wearer to others and to the environment. They also decrease the likelihood of potentially infectious droplets from others reaching the mouth and nose of the mask wearer. »*

<https://www.who.int/news-room/q-a-detail/q-a-on-covid-19-and-masks>

### STANDARDS

EN 14683

### INTENDED USE

They are used by medical workers and the general public.

## Respirator Mask - FFP2/KN95



To protect :

- The wearer against microorganisms transmitted by **airbone**.

They also offer a face tightness security




Useful in the sense of **inhalation**

*« these are specifically designed for healthcare workers who provide care to COVID-19 patients in settings and areas where special medical procedures are undertaken. Respirators are intended to protect the wearer when these medical procedures aerosolize smaller particles than normal droplets into the air in the health treatment area. Healthcare workers should be fit tested before using a respirator to ensure that the respirator is sealed tightly on the wearer's face and is properly fitted. Respirators with valves should not be used as the purpose of source control. »*

<https://www.who.int/news-room/q-a-detail/q-a-on-covid-19-and-masks>

EN 149

They are mainly used by health professionals and people working in an environment with a lot of particles (stone or wood sawmills for example)

MASK TYPE	STANDARDS	FILTRATION EFFECTIVENESS		
 <p><b>Single-Use Face Mask</b></p>	China: YY/T0969	3.0 Microns: ≥ 95% 0.1 Microns: X		
	China: YY 0460	3.0 Microns: ≥ 95% 0.1 Microns: X		
 <p><b>Surgical Mask</b></p>	USA: ASTM F2100	<b>Level 1</b> 3.0 Microns ≥ 95% 0.1 Microns: ≥ 95%	<b>Level 2</b> 3.0 Microns ≥ 98% 0.1 Microns: ≥ 98%	<b>Level 3</b> 3.0 Microns ≥ 98% 0.1 Microns: ≥ 98%
	Europe: EN 14683	<b>Type I</b> 3.0 Microns ≥ 95% 0.1 Microns: X	<b>Type II</b> 3.0 Microns ≥ 98% 0.1 Microns: X	<b>Type III</b> 3.0 Microns ≥ 98% 0.1 Microns: X
 <p><b>Respirator Mask</b></p>	USA: NIOSH (42 CFR 84) China: GB2626	<b>N95 / KN95</b> 0.3 Microns ≥ 95%	<b>N99 / KN99</b> 0.3 Microns ≥ 99%	<b>N100 / KN100</b> 0.3 Microns ≥ 99.97%
	Europe: EN 149:2001	<b>FFP1</b> 0.3 Microns ≥ 80%	<b>FFP2</b> 0.3 Microns ≥ 94%	<b>FFP3</b> 0.3 Microns ≥ 99%

3.0 Microns: Bacteria Filtration Efficiency standard (BFE)  
0.1 Microns: Particle Filtration Efficiency standard (PFE)  
0.3 Microns: Used to represent the most-penetrating particle size (MPPS), which is the most difficult size particle to capture  
**X**: no requirements