



# PU30<sup>TM</sup>

**Antiviral, Washable and Reusable Face Mask**  
**防病毒、可清洗、能重用口罩**

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**Frequently asked questions (FAQs)**  
**常見問題解答**

# 1. What is PU30™?

“PU30” is developed by a group of PolyU researchers. It is an antiviral, washable and reusable face mask which can be used for 30 times.

PU30™ trademark is owned by PolyU.



## 2. What are the materials used in PU30™?

It is a face mask consisted of 3 layers:

- **Outer layer:** cotton woven fabric treated with water repellent cationic antiseptic coating
- **Middle layer:** PTFE membrane with high filtration efficiency
- **Inner layer:** skin-friendly cotton lycra woven fabric



### 3. Could PU30™ face mask kill COVID-19?

The cationic antiseptic coating can inactivate virus. This reusable face mask inhibits tested strains of H1N1 and COVID-19 on contact with the surface of the face mask in laboratory (in-vitro) tests.





## 4. What is filtration efficiency of PU30™?

According to the ASTM F2100-2019 test:

- Sub-Micron Particulate Filtration Efficiency PFE (%) (0.1  $\mu\text{m}$  PSL) = **Ave. 99.2 %**
- Bacterial Filtration Efficiency BFE (%)  
Staphylococcus aureus ATCC 6538 > **99.9%**
- Viral Filtration Efficiency VFE (%)  
Bacteriophage phiX174 > **99.8%**





## 5. Could I wear PU30™ face mask to hospital / clinic?

PU30™ is a non-medical reusable face mask. We recommend disposable surgical mask for areas with high risk .

## 6. If the ear loop elastic is too tight, what could I do?

If the ear loop is too tight for you, here are two suggestions:

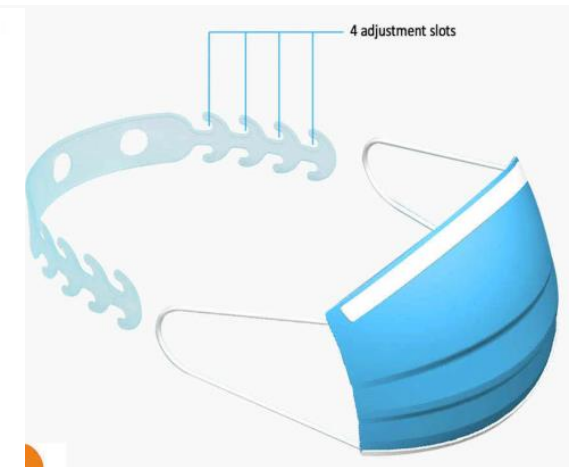
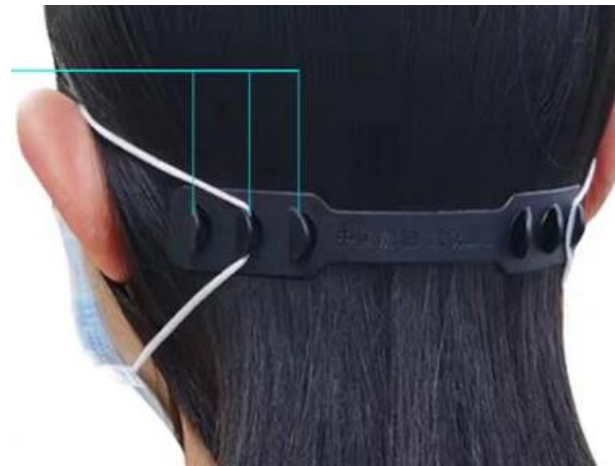
1. Replace **a longer ear loop elastic** by using sewing machine or hand stitch.



Opps!! If you don't have elastic at home, you could cut one from a new disposable mask.

## 6. If the ear loop elastic is too tight, what could I do?

2. Add **an adjustable face mask buckle**.






## 7. Would the ear loop loose elasticity after repeated wash for 30 times?

According to our washing test, please hang the face mask as shown in below pictures. The elasticity performance could be maintained.






## 8. What is the bacterial filtration efficiency after repeated wash?

After washed 30 times by boiling water:

The Bacterial Filtration Efficiency (BFE) > 95%\*

*\*Results based on in-house testing, laboratory test report from TTRI would be available soon.*




## 9. What is the Particle filtration efficiency after repeated wash?

After washed 30 times by boiling water:

The PFE percentage will **drop by 10%.**

Test Items		Test Results	Test Methods
Sub-Micron Particulate Filtration Efficiency(%) (0.1 $\mu$ m PSL)	1	92.16	ASTM F2100-2019 9.3
	2	89.73	ASTM F2299-2017
	3	93.88	Flow rate:28
	4	94.29	(Liter/min)
	5	93.71	
	Ave.	92.75	

Note: Sample description is given by the client: Face Mask (PU-HW30)



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**For more information >>**



**YouTube:** <https://www.youtube.com/watch?v=c99tP9AL0IA&feature=youtu.be>

**Website:** [https://www.polyu.edu.hk/fast/research/PU30\\_t/](https://www.polyu.edu.hk/fast/research/PU30_t/)

**Facebook:** <https://www.facebook.com/PU30ITCstore>