



職安衛股份有限公司 呼吸防護具檢測中心

CNS14774:2022 醫用面(口)罩

測試方法	測試項目	*工作天	樣本數
CNS14775:2022	細菌過濾效率	14	8
CNS14777:2003	壓差試驗	7	5
CNS14755:2022	次微米粒子防護效率-鹽霧法	7	10
CNS14776:2022	合成血液穿透性	7	13 或 32
CNS10285:1995 C 法	防焰性	7	10

*如檢測案件過多，以實驗室收件後之排程為主。

表 1 醫用面(口)罩之性能級別要求

性能	一般醫用面 (口)罩	外科手術面(口)罩			外科手術 TN95 防塵 面(口)罩
		一級	二級	三級	
合成血液穿透性，最小通過 壓力(mmHg)	-	80	120	160	80
細菌過濾效率(%)	≥95	≥95	≥98	≥98	-
次微米粒子 防護效率 (%)	A法：乳膠 球，0.1μm	≥95	≥98	≥98	-
	B法：鹽霧	≥80	-	-	≥95
壓差(mm H ₂ O/cm ²)	≤5	≤5	≤6	≤6	-
防焰性/可燃性	-	1 級	1 級	1 級	1 級
呼吸氣阻抗Pa					吸氣≤350 呼氣≤250



職安衛股份有限公司 呼吸防護具檢測中心

ASTM F2100-21 Standard Specification for Performance of Materials Used in Medical Face Masks

測試方法	測試項目	*工作天	樣本數
ASTM F2100-21 9.1/ ASTM F2101-19	Bacterial filtration efficiency	14	8
ASTM F2100-21 9.2/ EN 14683:2019 Annex C	Differential pressure	7	5
ASTM F2100-21 9.4/ ASTM F1862/F1862M-17	Resistance to penetration by synthetic blood	7	32
ASTM F2100-21 9.5/ 16 CFR PART 1610:2008	Flame spread	7	14

*如檢測案件過多，以實驗室收件後之排程為主。

ASTM F2100-21 TABLE 1 Medical Face Mask Material Requirements by Performance Level

Characteristic	Level 1 Barrier	Level 2 Barrier	Level 3 Barrier
Bacterial filtration efficiency, %	≥95	≥98	≥98
Differential pressure, mm H ₂ O/cm ²	< 5.0	< 6.0	< 6.0
Sub-micron particulate filtration efficiency at 0.1 micron, %	≥95	≥98	≥98
Resistance to penetration by synthetic blood, minimum pressure in mm Hg for pass result	80	120	160
Flame spread	Class 1	Class 1	Class 1

EN 14683:2019 Medical face masks – Requirements and test methods

測試方法	測試項目	*工作天	樣本數
EN 14683:2019 Annex B	Bacterial filtration efficiency	14	8
EN 14683:2019 Annex C	Differential pressure	7	5
ISO 22609:2004	Splash resistance pressure	7	32

*如檢測案件過多，以實驗室收件後之排程為主。

EN 14683:2019 Table 1 Performance requirements for medical face masks

Test	Type I ^a	Type II	Type IIR
Bacterial filtration efficiency (BFE), (%)	≥95	≥98	≥98
Differential pressure (Pa/cm ²)	< 40	< 40	< 60
Splash resistance pressure (kPa)	Not required	Not required	≥ 16,0
Microbial cleanliness (cfu/g)	≤30	≤30	≤30

^a Type I medical face masks should only be used for patients and other persons to reduce the risk of spread of infections particularly in epidemic or pandemic situations. Type I masks are not intended for use by healthcare professionals in an operating room or in other medical settings with similar requirements.