FFP2 Particle Filtering Mask / NR
EN 149: 2001+ A1: 2009 / CE / non-sterile
Filter Performance ≥ 94%

ILB-Product ID-No.: KN ZLL-non

Item	Details	Remark
China Ministry of Commerce White List Producer	Yes	CE/ FDA EUA
CE Certificate	Universal Certifications	**NB 2163**
Test Report by	National Protection Testing LLC, USA	
Applied standard	EN 149: 2001+ A1: 2009	FFP 2 / NR
Product classification	PPE	
Sterile / Non Sterile	Non Sterile	
Color	White	
Packaging	50 pcs/ box 1000 pcs/ Ctn 8.9 kg / Ctn	

FFP2 disposable particle filtering masks with ear loop & nose clip

FFP2 masks as Personal Protective Equipment would require penetration of filter materials ≤ 6%. The CE certificate is issued by Universal Certifications from Turkey, with Notified Body Number of 2163. The test report is done by National Protection Testing LLC, USA.

TECHNICAL SPECIFICATIONS

FFP2 disposable particle filtering masks with ear loop and nose clip for protection against solid and liquid aerosols.

- CE 2163, also recognized by US CDC EUA
- Adjustable nose clip
- High wearing comfort, can also be worn by glasses wearers
- Filter Performance: ≥ 94%
- Mask size: 10.6 x 2 x 16 cm
- Material (5-ply):
- - 1st layer: Non-woven fabric
  - 2nd layer: high density melt spray
  - 3rd layer: Non-woven Static Cotton
  - 4th layer: high density melt spray
  - 5th layer: Non-woven fabric
- Packing unit: pack of 50 pcs

Technical KNOW-HOW

Based on this comparison, it is reasonable to consider China KN95, AS/NZ P2, Korea 1st Class, and Japan DS FFRs as "equivalent" to US NIOSH N95 and European FFP2 respirators, for filtering non-oil-based particles such as those resulting from wildfires, PM 2.5 air pollution, volcanic eruptions, or bioaerosols (e.g. viruses). However, prior to selecting a respirator, users should consult their local respiratory protection regulations and requirements or check with their local public health authorities for selection guidance.

Certification/ Class (Standard)	N95 (NIOSH-42C FR84)	FFP2 (EN 149-2001)	KN95 (GB2626-2006)	P2 (AS/NZ 1716:2012)	Korea 1st Class (KMOEL - 2017-64)	DS (Japan JMHLW-Notification 214, 2018)
Filter performance – (must be ≥ X% efficient)	≥ 95%	≥ 94%	≥ 95%	≥ 94%	≥ 94%	≥ 95%
Test agent	NaCl	NaCl and paraffin oil	NaCl	NaCl	NaCl and paraffin oil	NaCl
Flow rate	85 L/min	95 L/min	85 L/min	95 L/min	95 L/min	85 L/min
Total inward leakage (TIL)* – tested on human subjects each performing exercises	N/A	≤ 8% leakage (arithmetic mean)	≤ 8% leakage (arithmetic mean)	≤ 8% leakage (individual and arithmetic mean)	≤ 8% leakage (arithmetic mean)	Inward Leakage measured and included in User Instructions
Inhalation resistance – max pressure drop	≤ 343 Pa	≤ 70 Pa (at 30 L/min) ≤ 240 Pa (at 95 L/min) ≤ 500 Pa (clogging)	≤ 350 Pa	≤ 70 Pa (at 30 L/min) ≤ 240 Pa (at 95 L/min)	≤ 70 Pa (at 30 L/min) ≤ 240 Pa (at 95 L/min)	≤ 70 Pa (w/valve) ≤ 50 Pa (no valve)
Flow rate	85 L/min	Varied – see above	85 L/min	Varied – see above	Varied – see above	40 L/min
Exhalation resistance - max pressure drop	≤ 245 Pa	≤ 300 Pa	≤ 250 Pa	≤ 120 Pa	≤ 300 Pa	≤ 70 Pa (w/valve) ≤ 50 Pa (no valve)
Flow rate	85 L/min	160 L/min	85 L/min	85 L/min	160 L/min	40 L/min
Exhalation valve leakage requirement	Leak rate ≤ 30 mL/min	N/A	Depressurization to 0 Pa ≥ 20 sec	Leak rate ≤ 30 mL/min	visual inspection after 300 L /min for 30 sec	Depressurization to 0 Pa ≥ 15 sec
Force applied	-245 Pa	N/A	-1180 Pa	-250 Pa	N/A	-1,470 Pa
CO_2 clearance requirement	N/A	≤ 1%	≤ 1%	≤ 1%	≤ 1%	≤ 1%

*Japan JMHLW-Notification 214 requires an Inward Leakage test rather than a TIL test.